

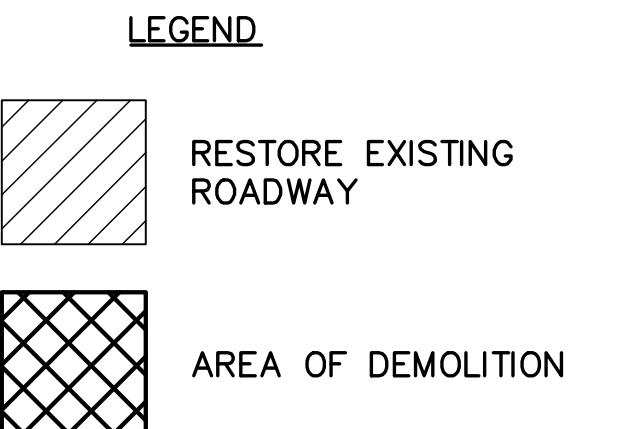
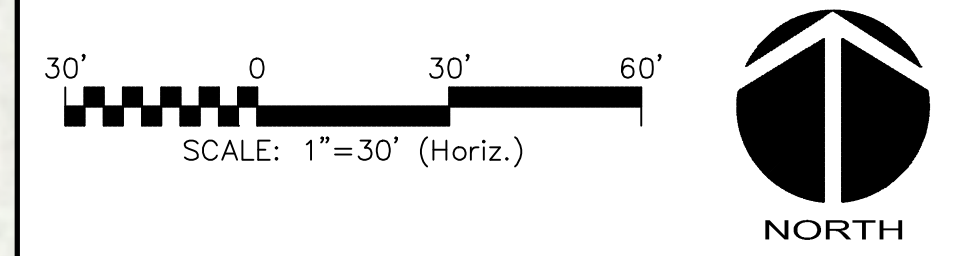
MAINTENANCE BLDG. SEPTIC TANK TO BE ABANDONED
EXIST. DRAIN FIELD TO BE REMOVED

GUARD SHACK WET WELL TO BE REMOVED
EXIST. DRAIN FIELD TO BE REMOVED
EXIST. CONTROL PANEL TO BE REMOVED

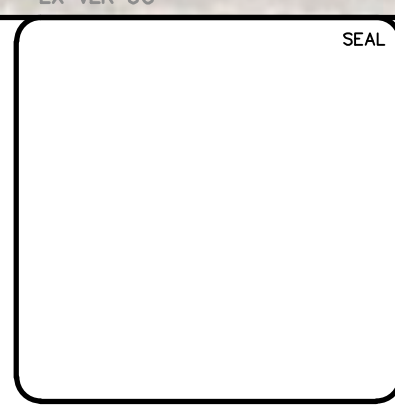
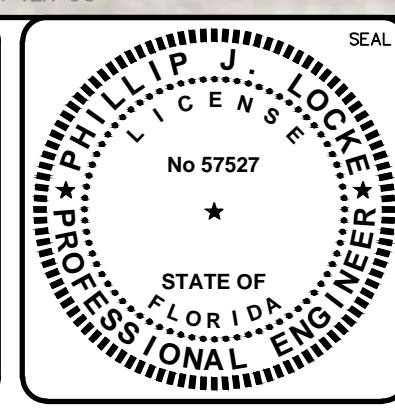
PUMP STATION TO BE REMOVED

CONTROL ROOM SEPTIC TANK TO BE ABANDONED
EXIST. DRAIN FIELD TO BE REMOVED

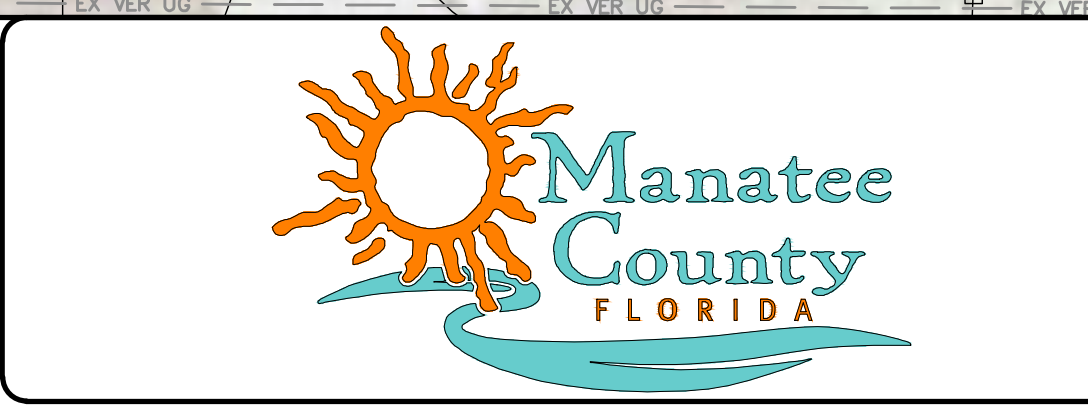
SEE ENLARGED PLAN SHEET C-1.2



REV. NO.	DESCRIPTIONS / REVISIONS	DATE



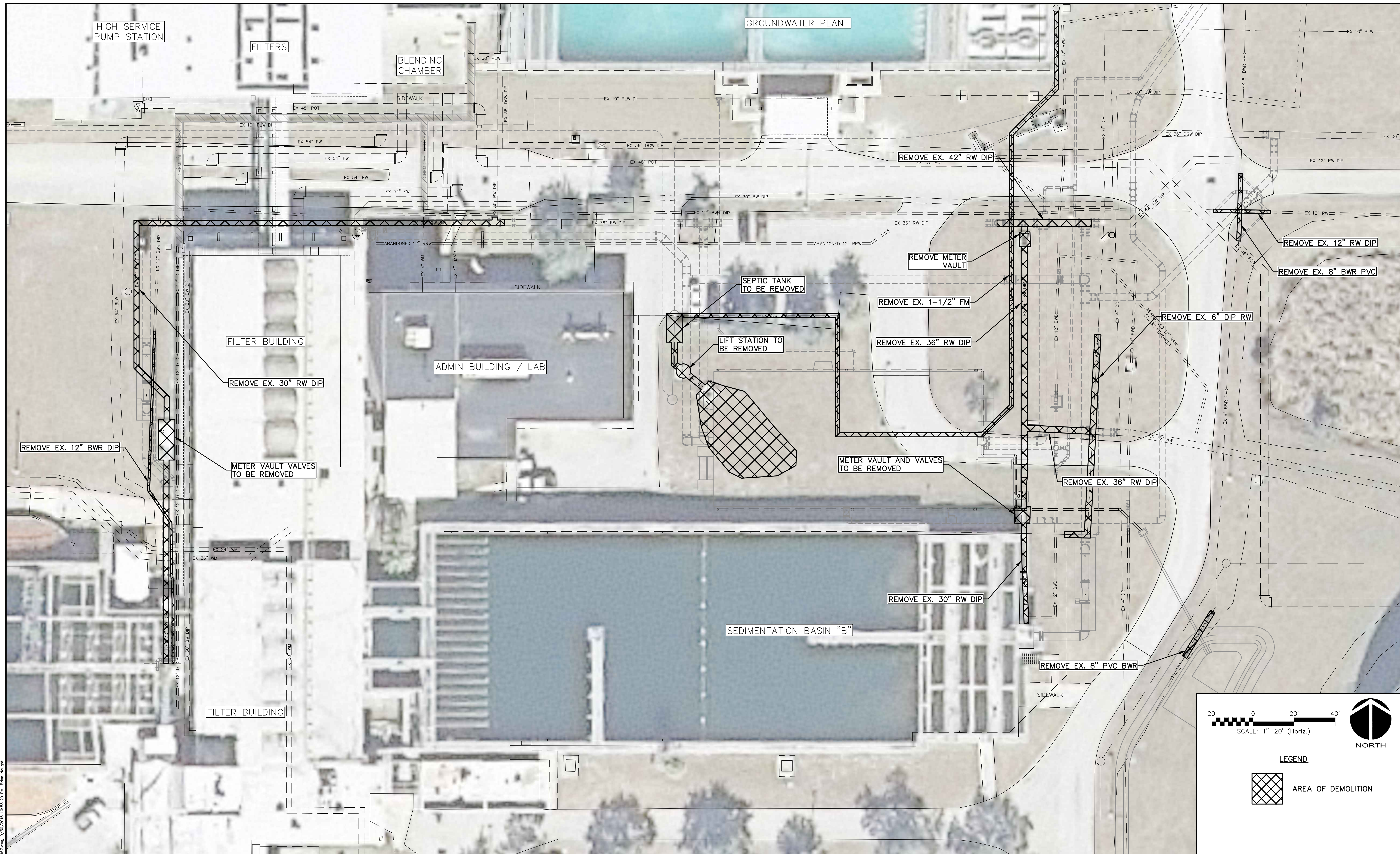
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**MANATEE COUNTY
 WTP BIOLOGICAL TREATMENT UNIT**
**EXISTING SITE, DEMOLITION AND
 RESTORATION PLAN**

DATE: OCTOBER 2015	SCALE: 1" = 30'	DRAWING NUMBER: C-1.1
MCE PROJ. # 1024-0167	HORIZONTAL: 1" = 30'	
DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR: P.J.		
STATUS: ISSUE FOR BID		REVISION:

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20' 0 20' 40'

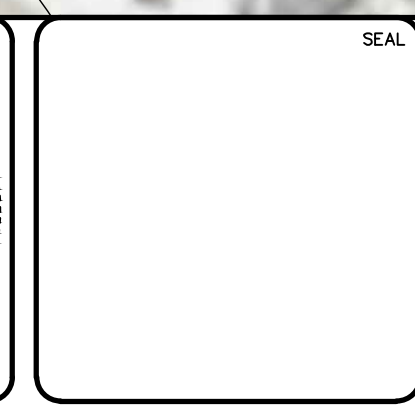
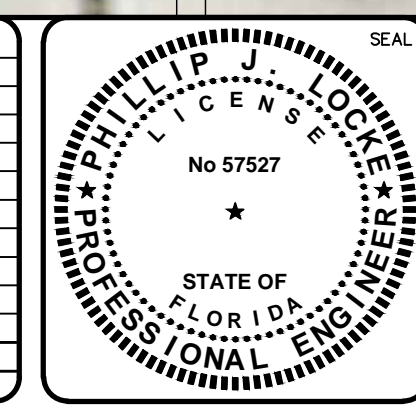
SCALE: 1"=20' (Horiz.)

NORTH

LEGEND

AREA OF DEMOLITION

REV. NO.	DESCRIPTIONS	DATE



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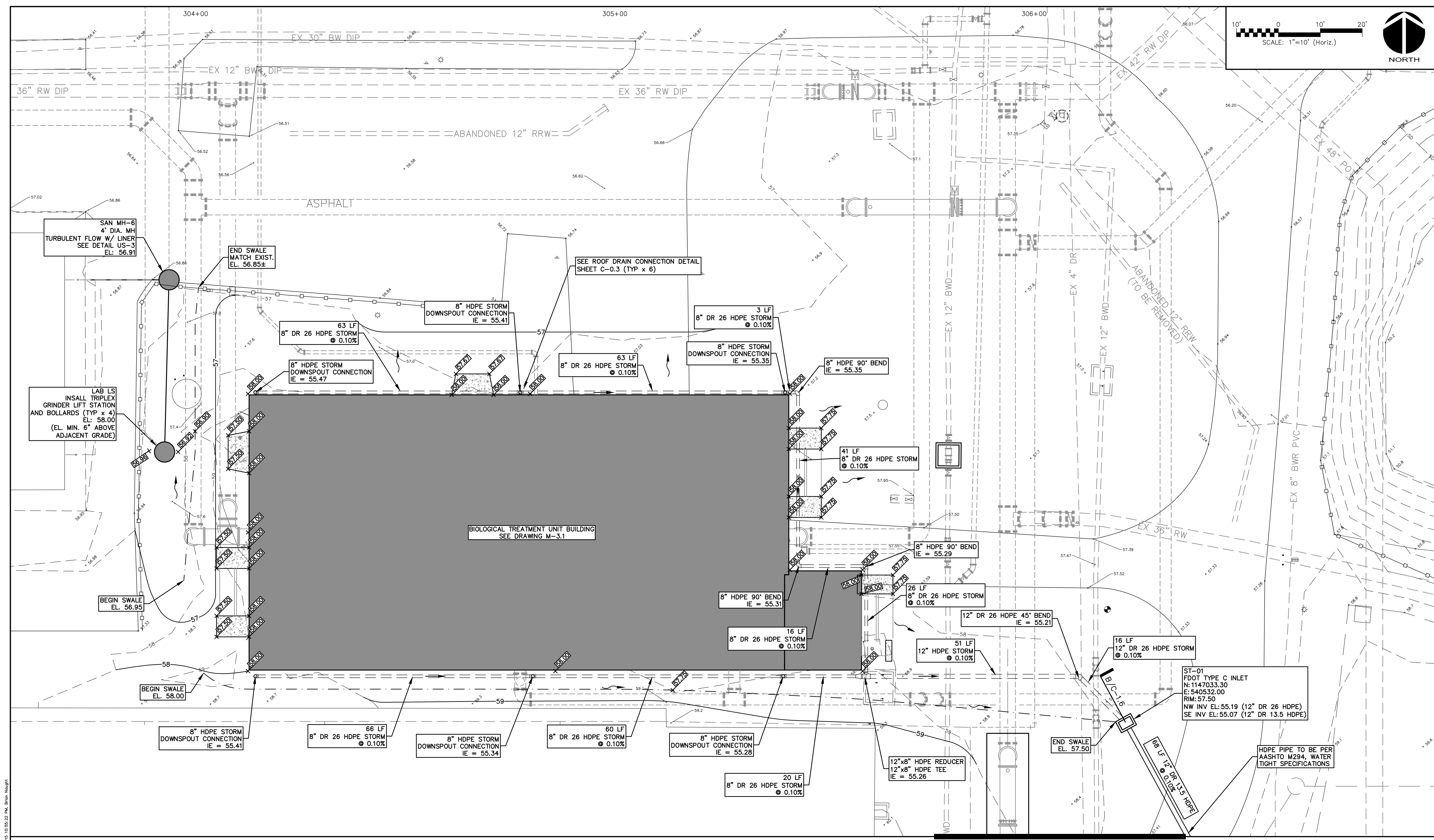
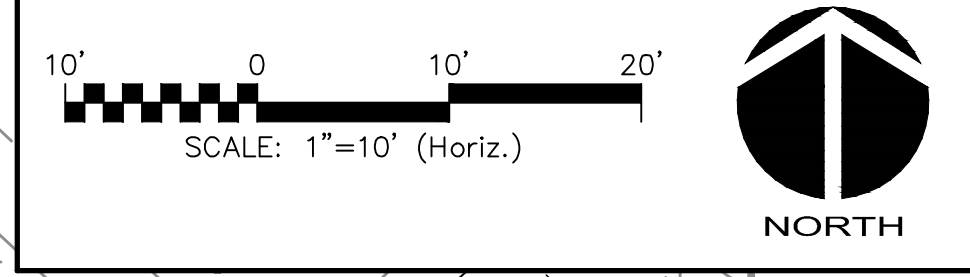


MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

DEMOLITION ENLARGED PLAN

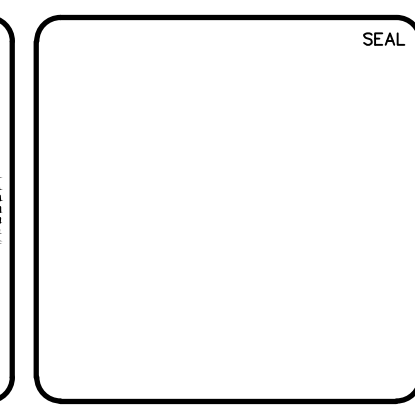
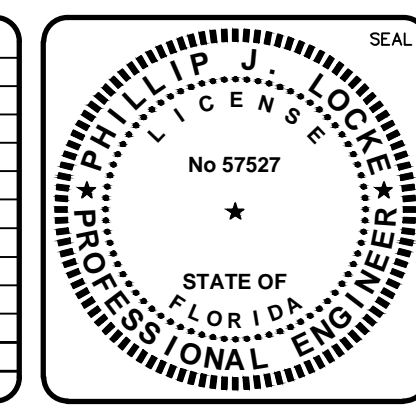
DATE: OCTOBER 2015	SCALE:	DRAWING NUMBER:
MCE PROJ. # 1024-0167	HORIZONTAL: 1" = 20'	C-1.2
DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR: P.J.		
STATUS: ISSUE FOR BID		REVISION:

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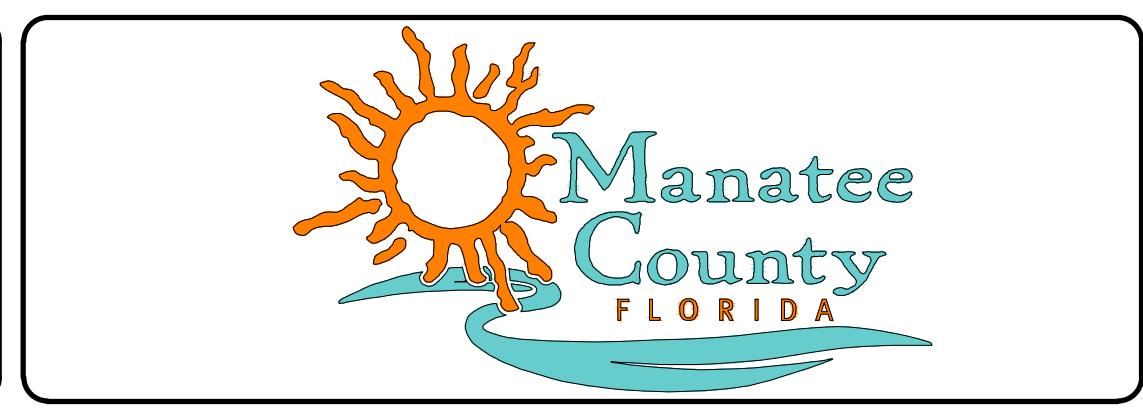


MATCHLINE - SEE SHEET C-1.5

REV. NO.	DESCRIPTIONS	DATE



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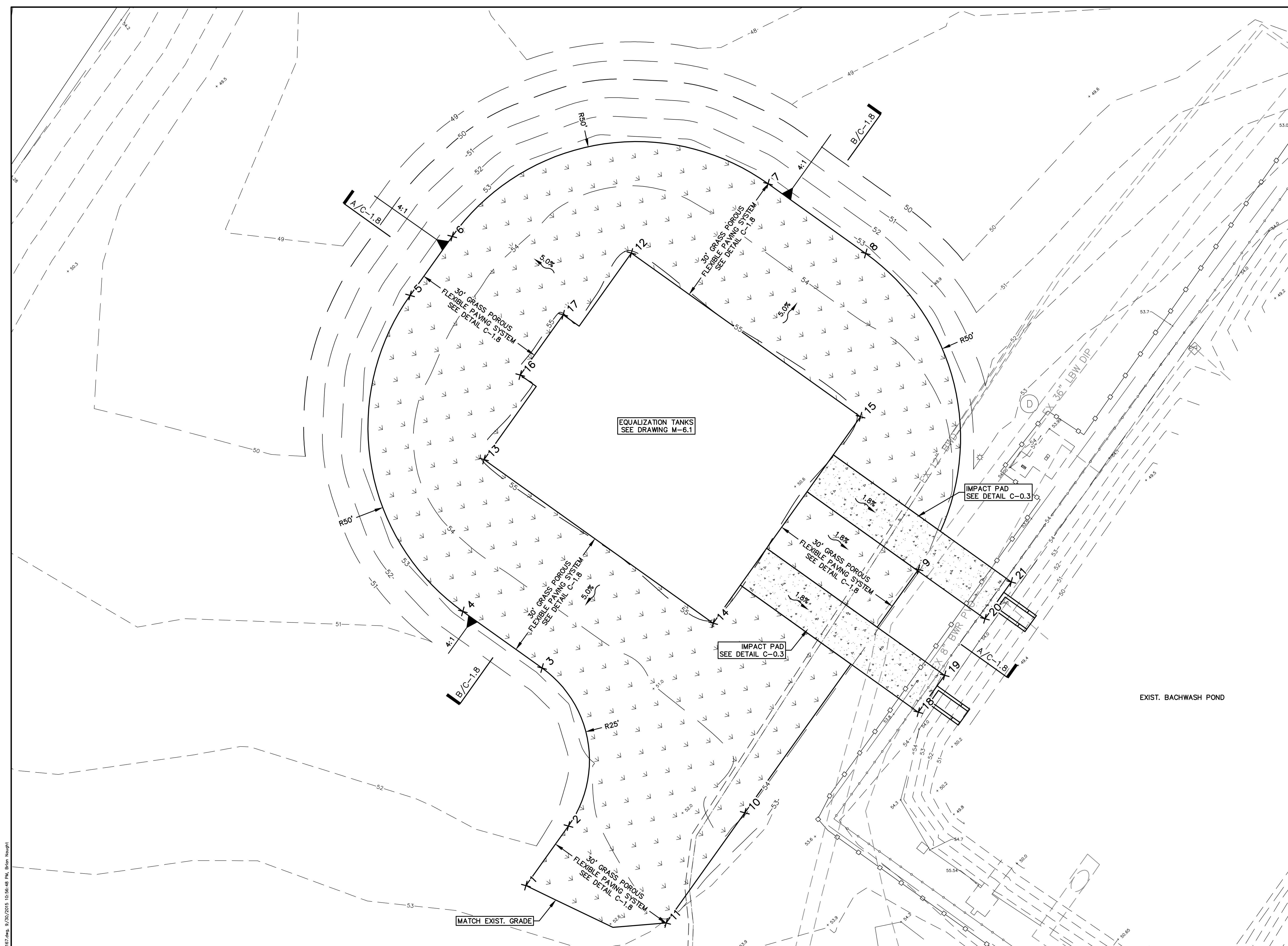
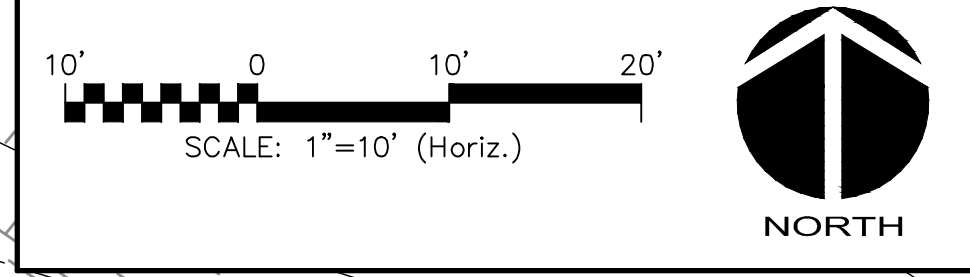


MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

STORMWATER PLAN 1 OF 2

DATE: OCTOBER 2015	SCALE: 1" = 10'	DRAWING NUMBER: C-1.4
MCE PROJ. # 1024-0167	HORIZONTAL: 1" = 10'	REVISION:
DRAWN: BFN	VERTICAL: NA	
DESIGNED: CRB		
CHECKED: JSL		
PROJ. MGR: P.J.		
STATUS: ISSUE FOR BID		

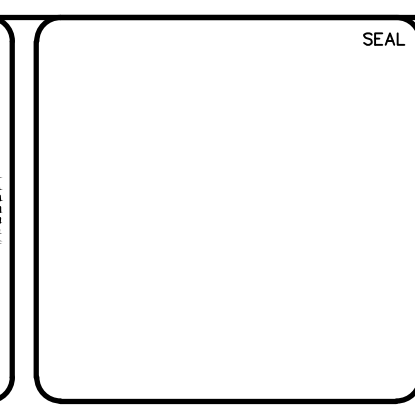
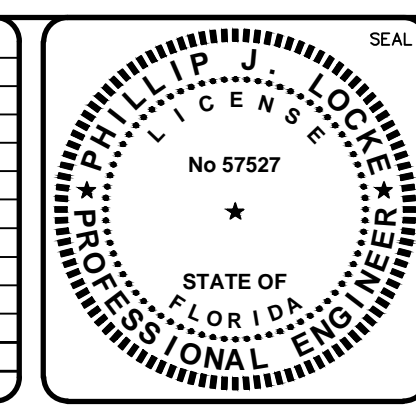
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GRASS DRIVE LOCATION TABLE			
POINT #	DESCRIPTION	LOCATION	ELEVATION
1	MATCH EXISTING	N:1147511.45 E:540502.33	52.43
2	PC	N:1147524.61 E:540511.72	52.71
3	PT	N:1147559.48 E:540505.90	53.37
4	PC	N:1147571.97 E:540488.40	53.37
5	PT	N:1147641.72 E:540476.76	53.37
6	PC	N:1147654.74 E:540486.06	53.37
7	PT	N:1147666.38 E:540555.80	53.37
8	PC	N:1147650.98 E:540577.37	53.37
9	PT	N:1147581.24 E:540589.01	54.33
10	EDGE OR DRIVE	N:1147527.52 E:540550.66	54.33
11	MATCH EXISTING	N:1147503.20 E:540533.30	53.04
12	SW CORNER	N:1147651.07 E:540525.62	55.20
13	SW CORNER	N:1147605.49 E:540493.08	55.20
14	SW CORNER	N:1147569.37 E:540543.68	55.20
15	SW CORNER	N:1147614.95 E:540576.22	55.20
16	PAD CORNER	N:1147624.15 E:540501.08	55.20
17	PAD CORNER	N:1147637.44 E:540510.57	55.20
18	IMPACT PAD CORNER	N:1147549.72 E:540588.98	54.00
19	IMPACT PAD CORNER	N:1147557.86 E:540594.79	54.00
20	IMPACT PAD CORNER	N:1147570.34 E:540603.70	54.00
21	IMPACT PAD CORNER	N:1147578.48 E:540609.51	54.00

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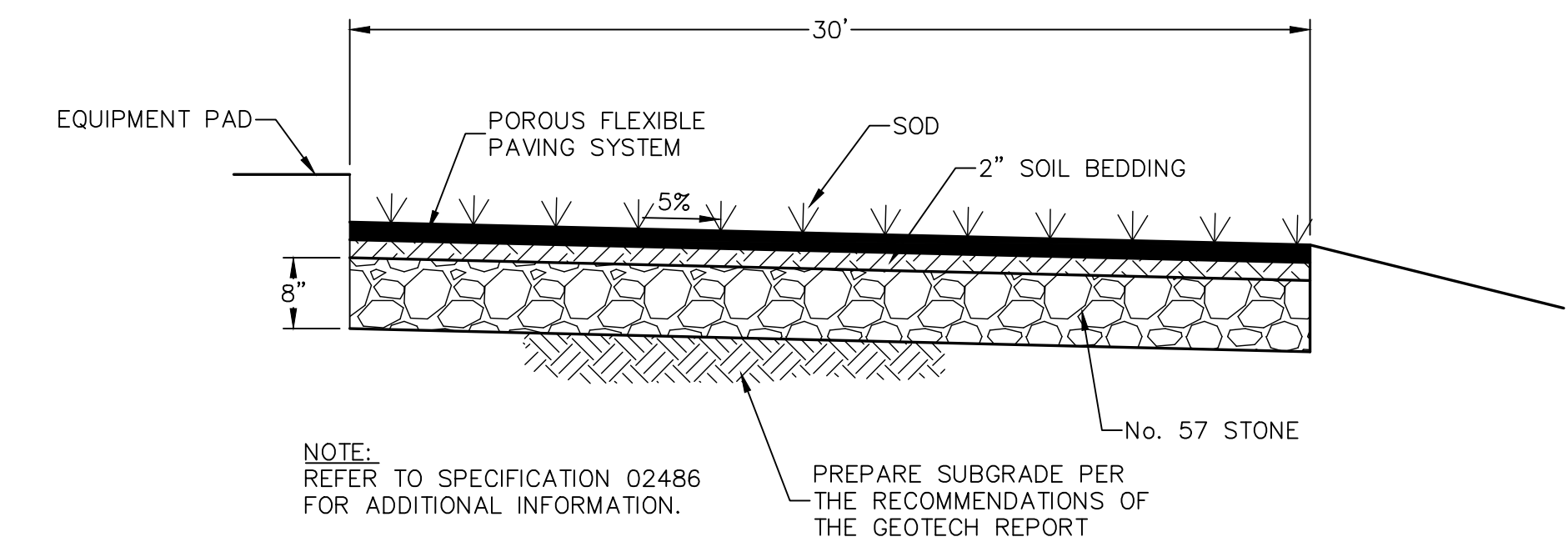
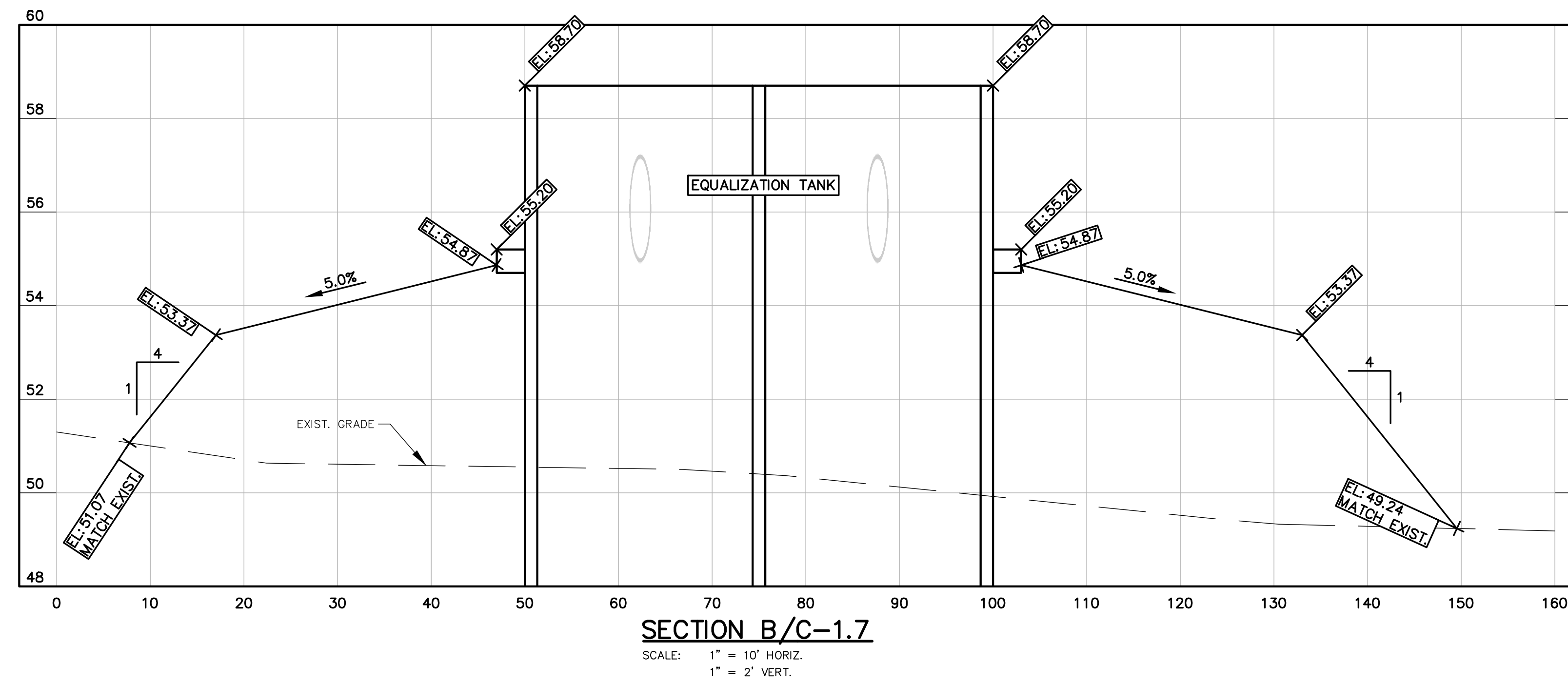
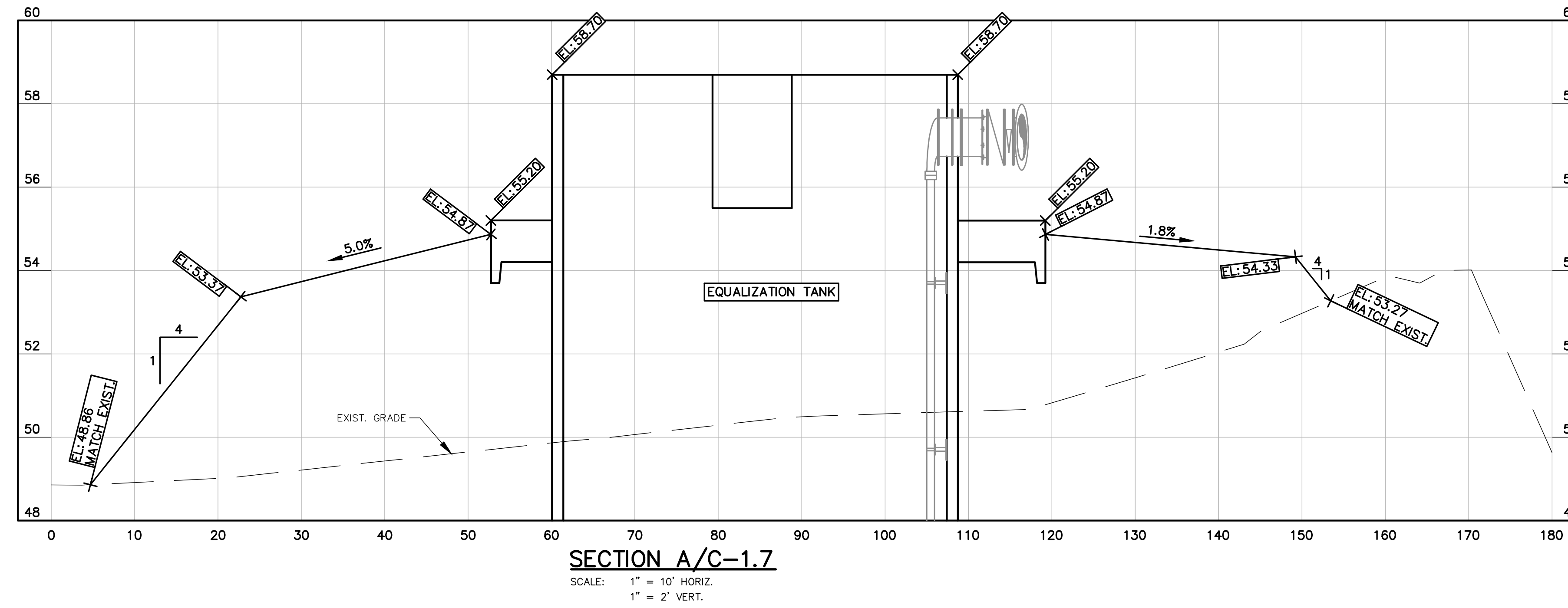

Manatee County
 FLORIDA

MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

EQUALIZATION TANK
GRADING PLAN

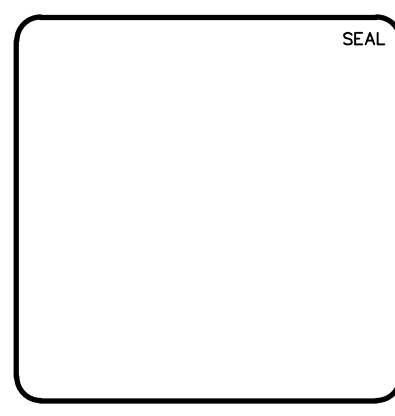
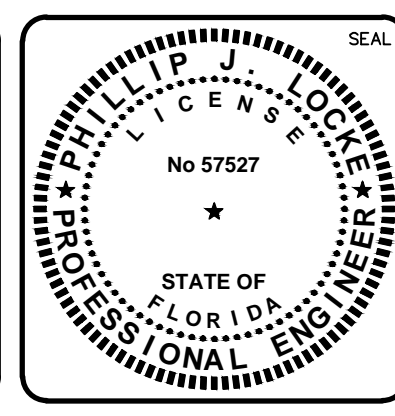
DATE: OCTOBER 2015	SCALE:	DRAWING NUMBER:
MCE PROJ. # 1024-0167	HORIZONTAL: 1" = 10'	C-1.7
DRAWN: BFN	VERTICAL: NA	REVISION:
DESIGNED: P.J.L.		
CHECKED: J.S.L.		
PROJ. MGR: P.J.L.		
STATUS: ISSUE FOR BID		

NOTE:
YARD PIPING NOT SHOWN FOR CLARITY.

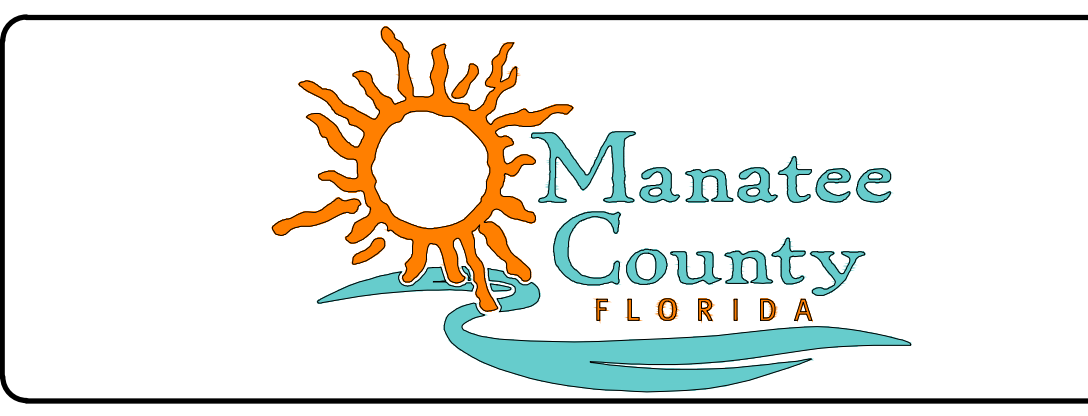


F:\1024\0167\100-drawings\CAD\2402-1040167.dwg, 9/29/2015 10:27:02 PM, Brian Nangit

REV. NO.	DESCRIPTIONS	DATE



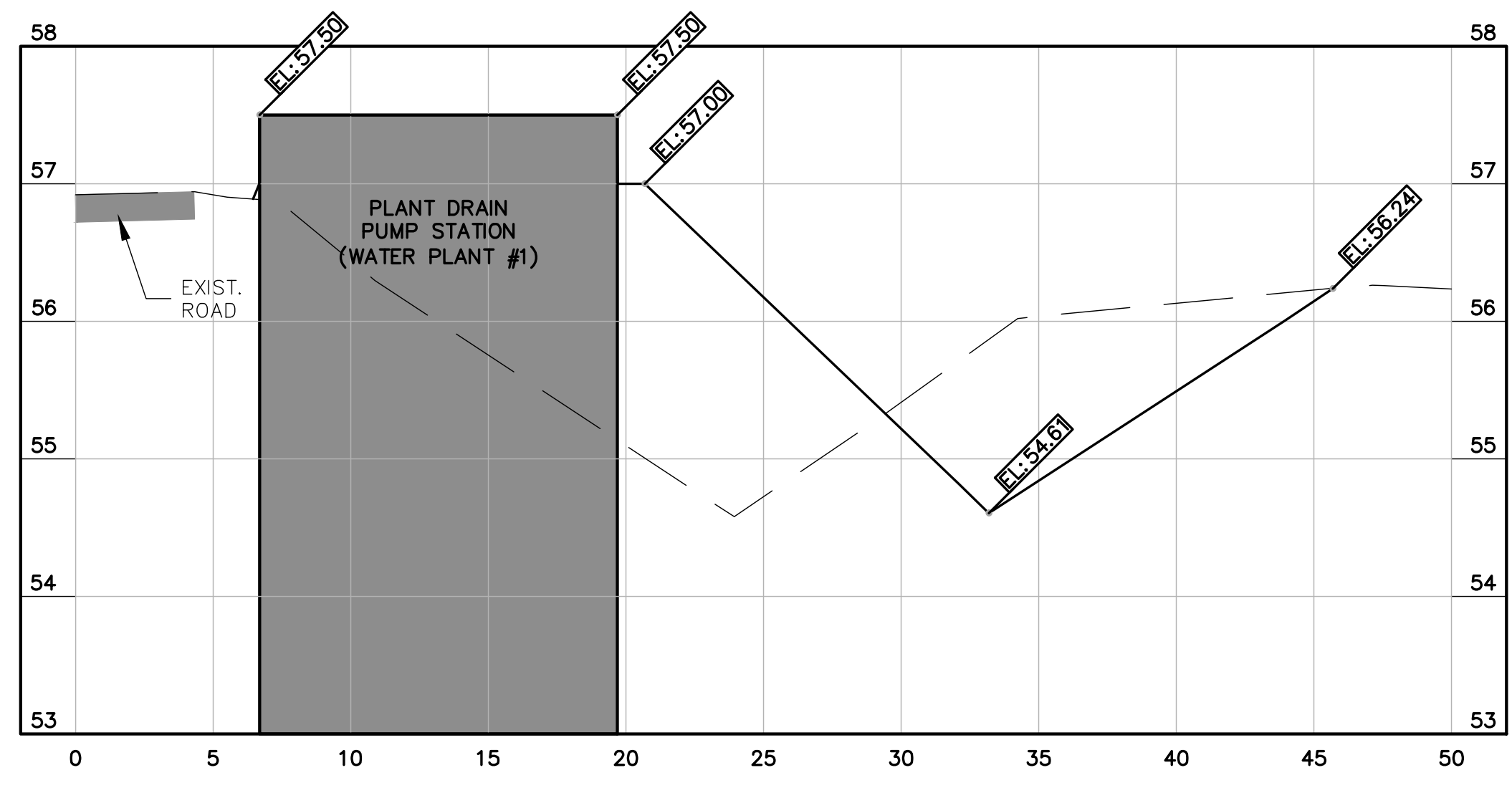
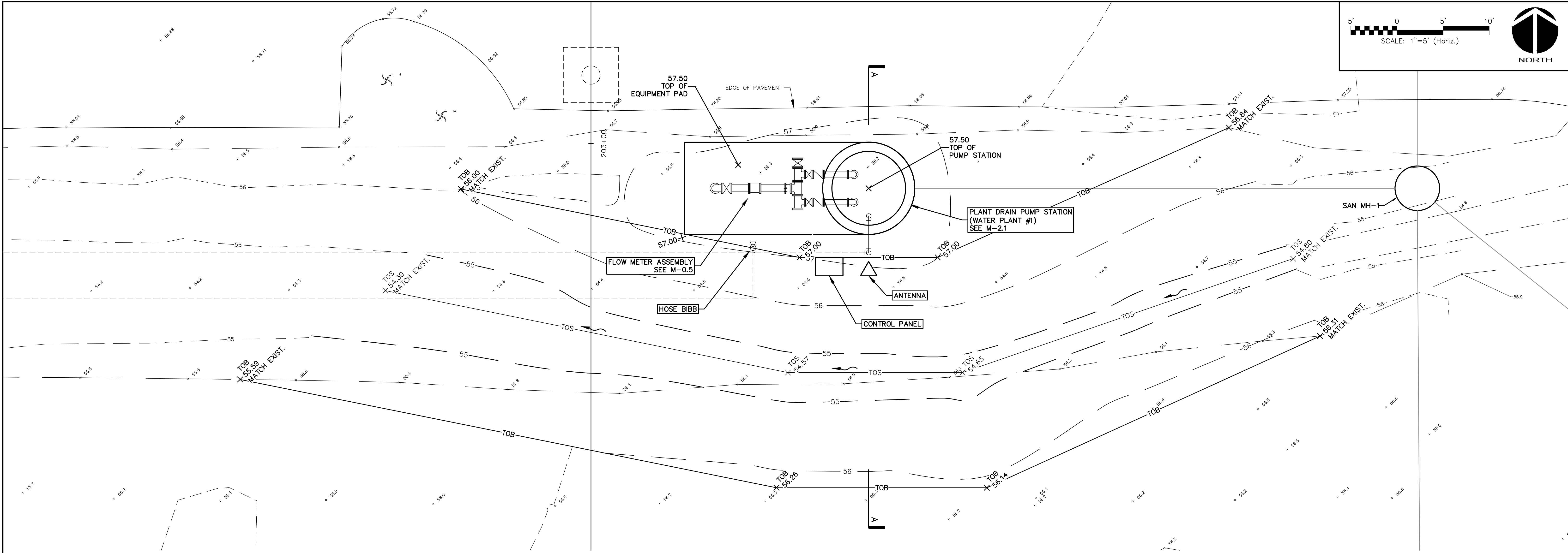
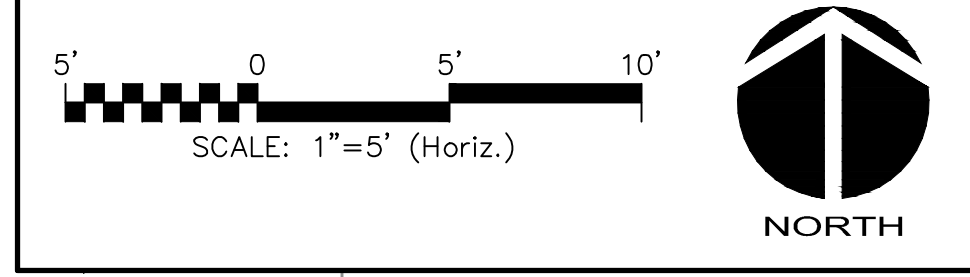
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WTP BIOLOGICAL TREATMENT UNIT**

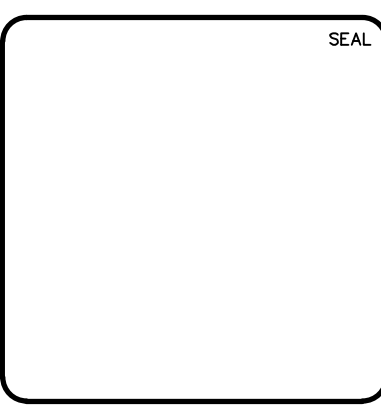
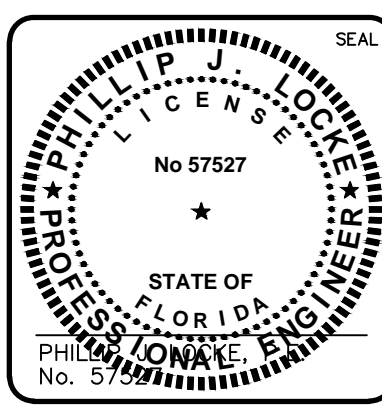
**EQUALIZATION TANK GRADING
SECTIONS AND DETAILS**

DATE: OCTOBER 2015	SCALE: 1" = 10' HORIZONTAL, 1" = 2' VERTICAL	DRAWING NUMBER: C-1.8
MCE PROJ. # 1024-0167	DESIGNED: BFN	
CHECKED: JSL	PROJ. MGR: P.J.	
STATUS: ISSUE FOR BID		

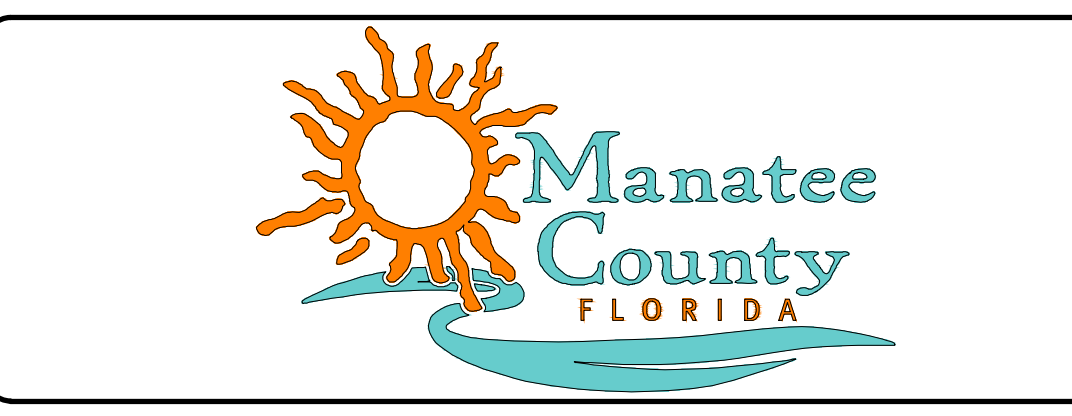


SECTION A
SCALE: 1" = 5' HORIZ.
1" = 1' VERT.

REVNO.	DESCRIPTIONS	DATE
A	REVISED PER COUNTY COMMENTS	10-08-2015
REVISIONS		



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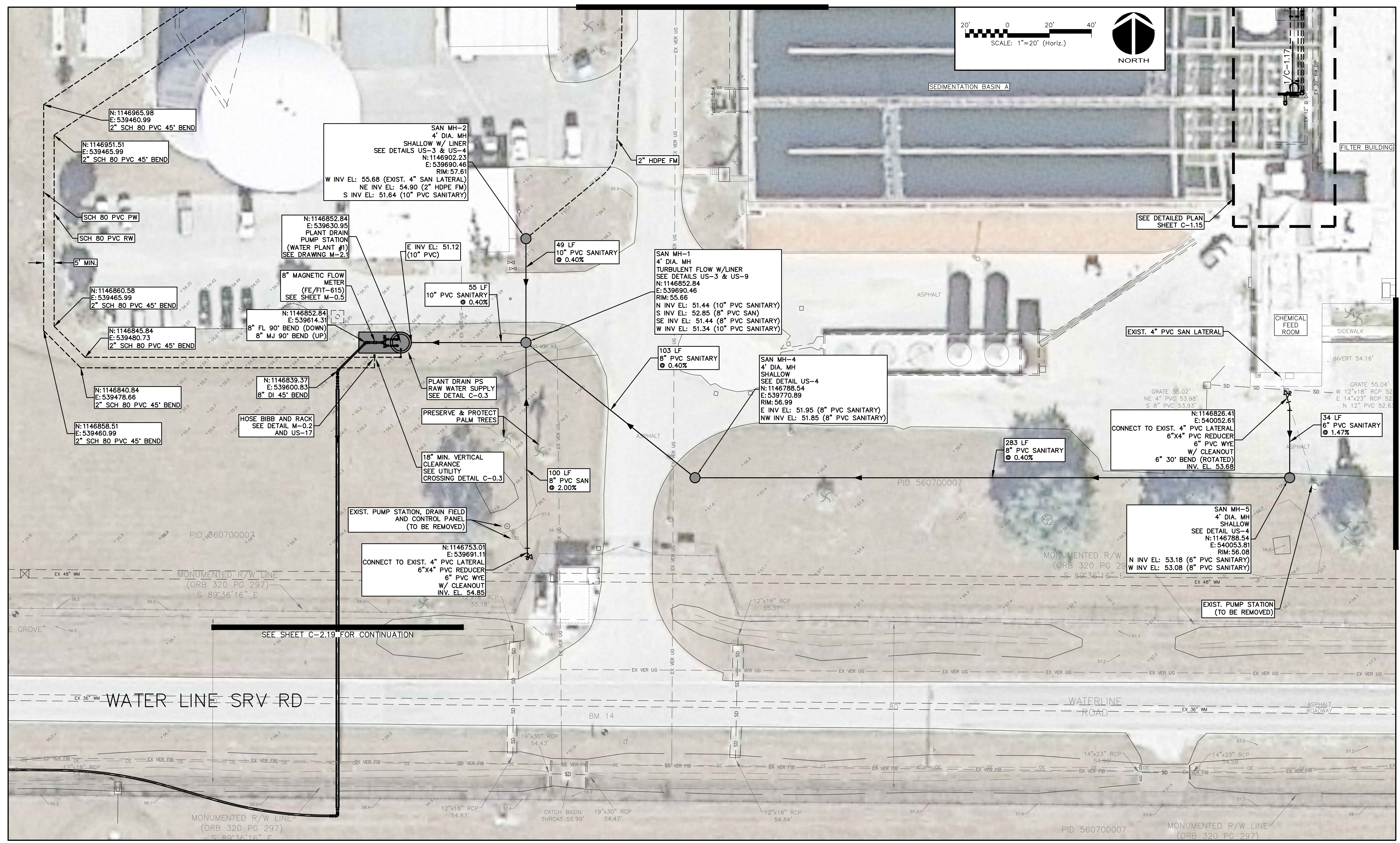
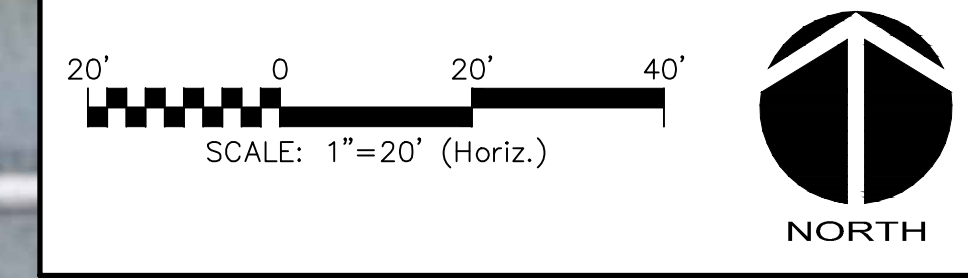


MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

PLANT DRAIN PUMP STATION
GRADING PLAN AND SECTION

DATE: OCTOBER 2015	SCALE: 1" = 5' HORIZONTAL, 1" = 1' VERTICAL	DRAWING NUMBER: C-1.9
MCE PROJ. # 1024-0167	DESIGNED: BFN	REVISION:
CHECKED: JSL	PROJ. MGR: P.J.	
ISSUE FOR BID		

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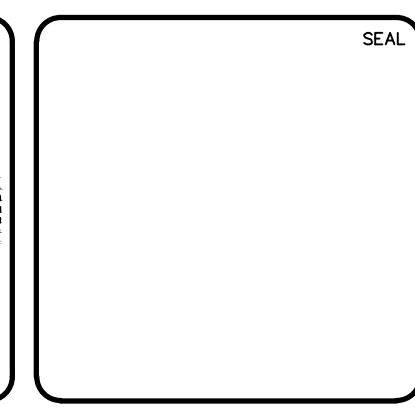
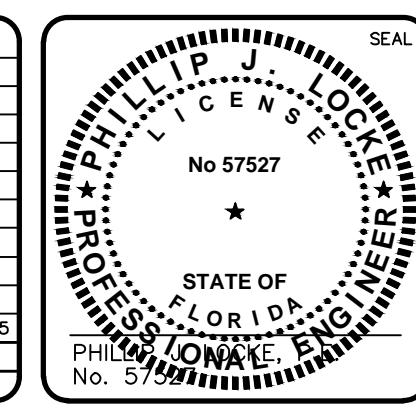
MATCHLINE - SEE SHEET C-1.11

SEE SHEET C-2.19 FOR CONTINUATION

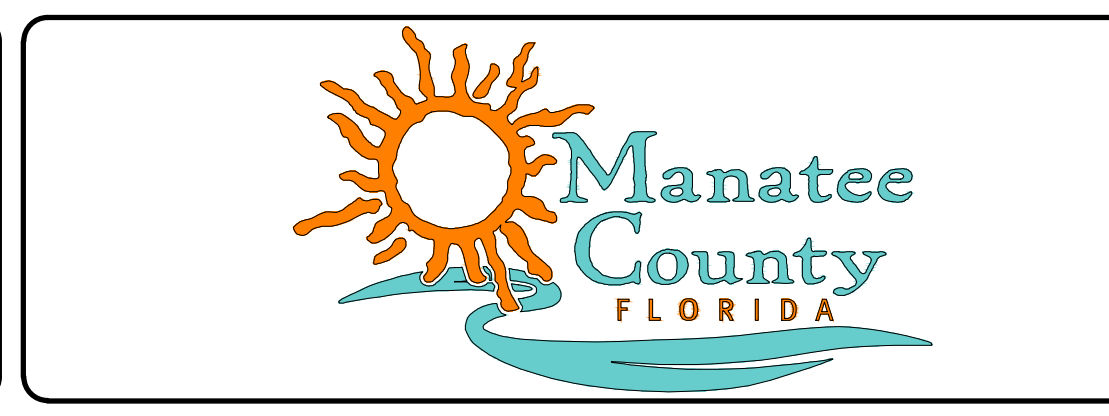
WATER LINE SRV RD

WATERLINE ROAD

REVNO.	DESCRIPTIONS	DATE
A	REVISED PER COUNTY COMMENTS	10-08-2015



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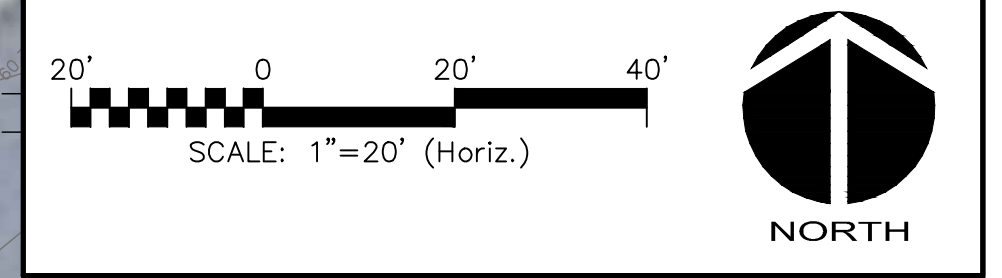


**MANATEE COUNTY
 WTP BIOLOGICAL TREATMENT UNIT**

YARD PIPING PLAN 1 OF 5

DATE: OCTOBER 2015	SCALE: 1" = 20'	DRAWING NUMBER: C-1.10
MCE PROJ. # 1024-0167	HORIZONTAL: NA	REVISION:
DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR: P.J.		
ISSUE FOR BID		

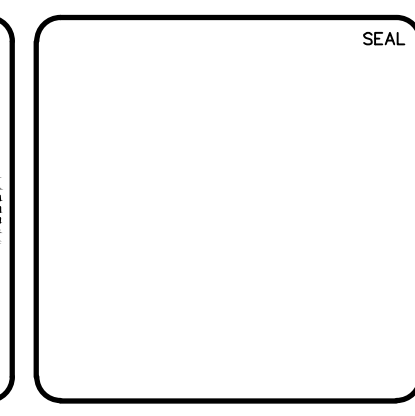
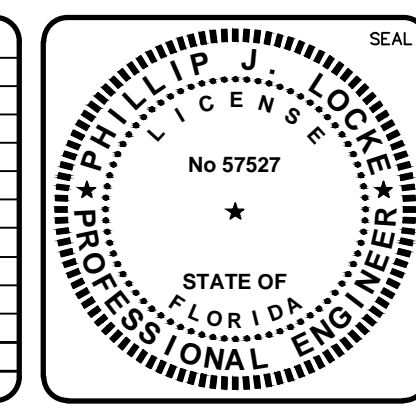
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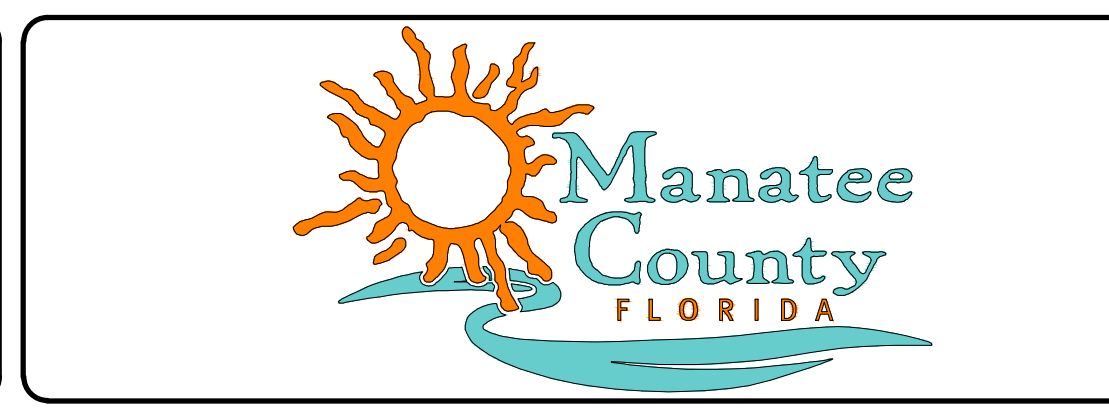
MATCHLINE - SEE SHEET C-1.10



REV. NO.	DESCRIPTIONS	DATE



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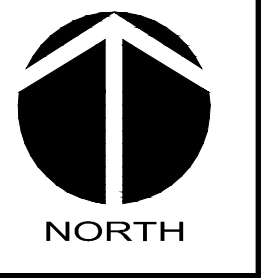
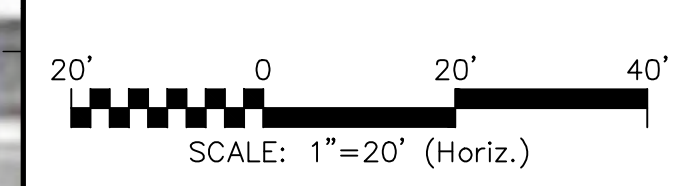


**MANATEE COUNTY
 WTP BIOLOGICAL TREATMENT UNIT**

YARD PIPING PLAN 2 OF 5

DATE: OCTOBER 2015	SCALE: 1" = 20'	DRAWING NUMBER: C-1.11
MCE PROJ. # 1024-0167	HORIZONTAL: NA	REVISION:
DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR: P.J.		
ISSUE FOR BID		

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CONNECT TO EXIST. 16" PW
(TO BE FIELD LOCATED)
16"x4" TAPPING SLEEVE AND VALVE
4" DI TO PVC TRANSITION COUPLER
4"x2" PVC REDUCER

CONNECT TO EXIST. 2" RW
(TO BE FIELD LOCATED)
CUT IN 2" SCH 80 PVC TEE

BACKFLOW PREVENTER
SEE DETAIL C-0.6

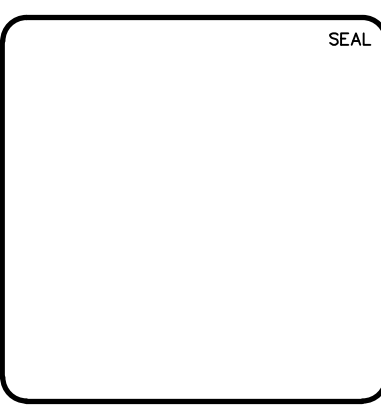
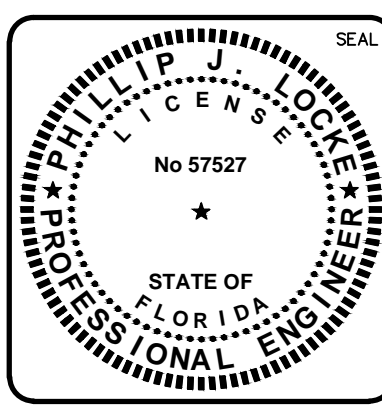
BACKFLOW PREVENTER
SEE DETAIL C-0.6

MATCHLINE - SEE SHEET C-1.10

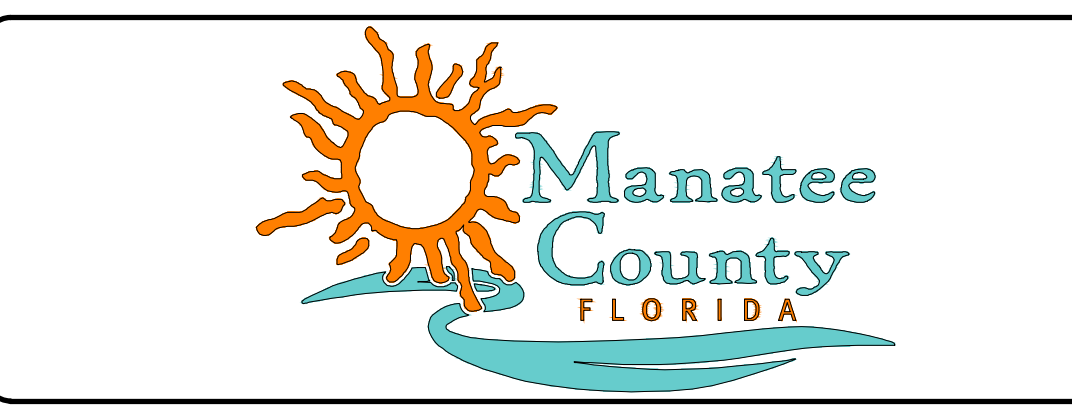
MATCHLINE - SEE SHEET C-1.13

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REV. NO.	DESCRIPTIONS REVISIONS	DATE



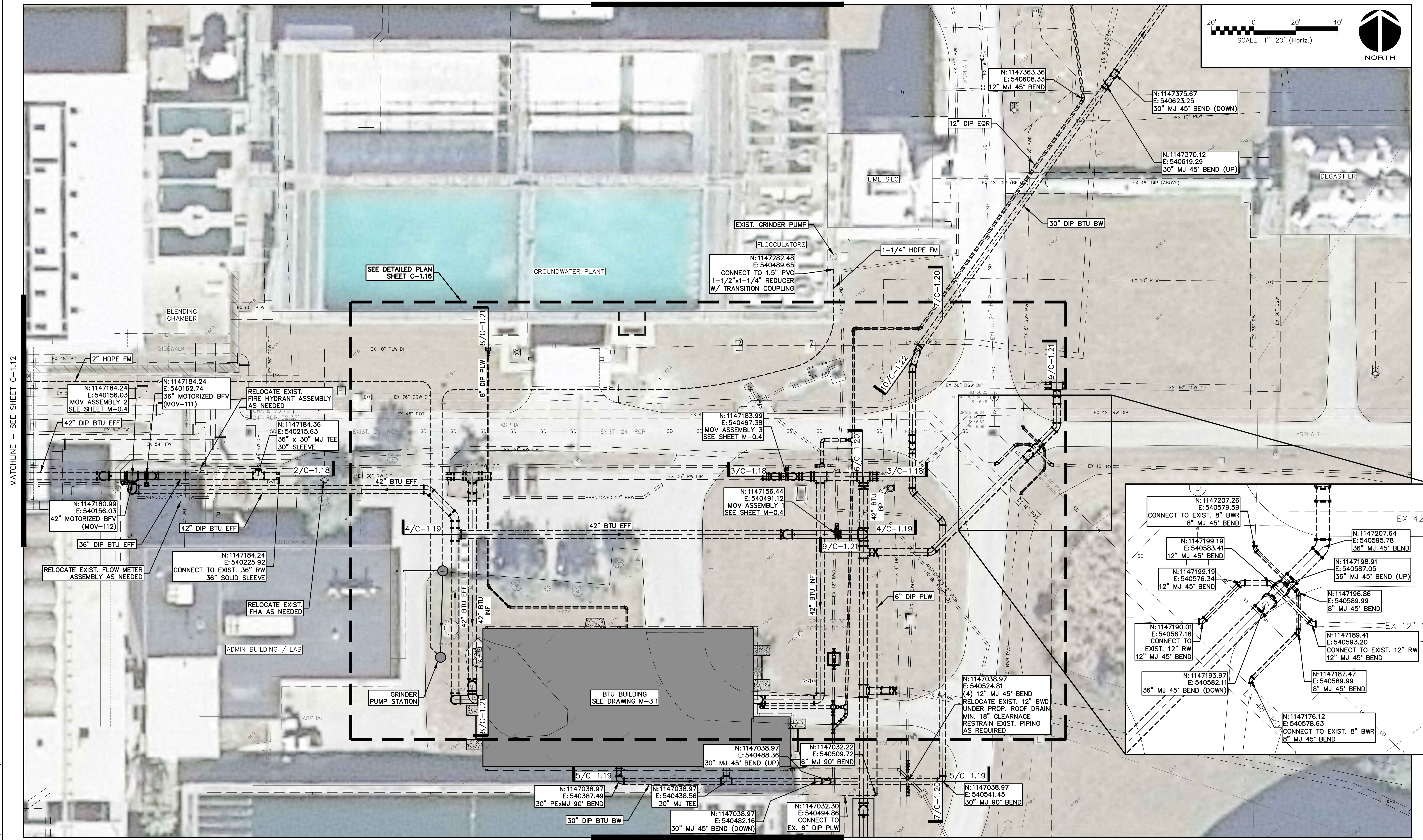
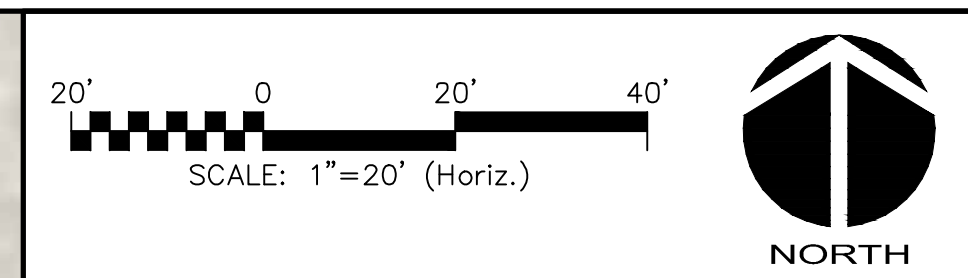
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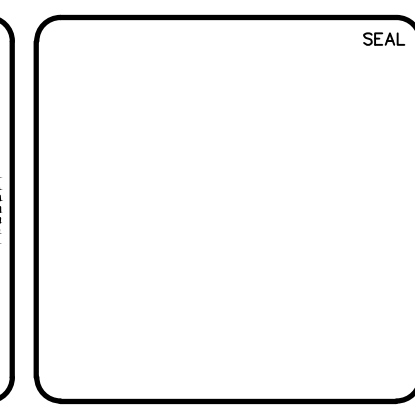
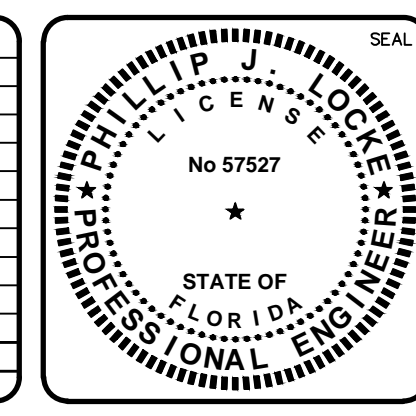
MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

YARD PIPING PLAN 3 OF 5

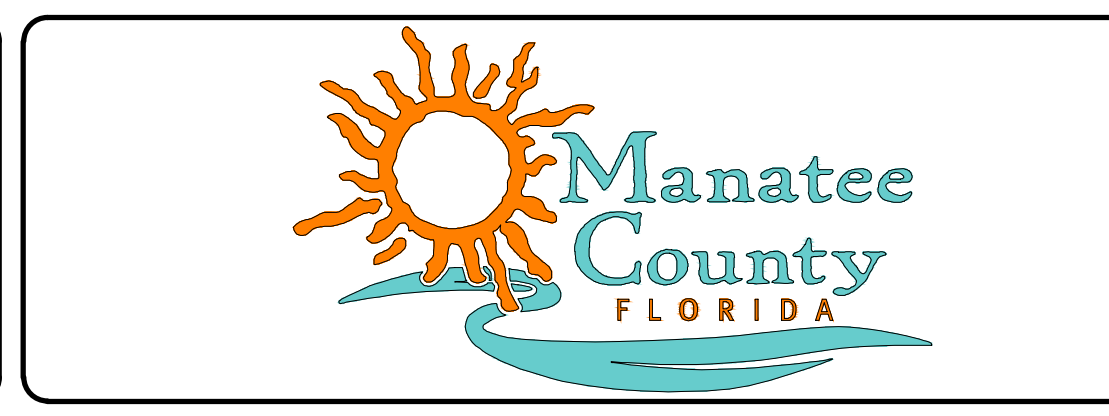
DATE: OCTOBER 2015	SCALE: 1" = 20'	DRAWING NUMBER: C-1.12
MCE PROJ. # 1024-0167	HORIZONTAL: 1" = 20'	REVISION:
DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR: P.J.		
ISSUE FOR BID		



REV. NO.	DESCRIPTIONS	DATE



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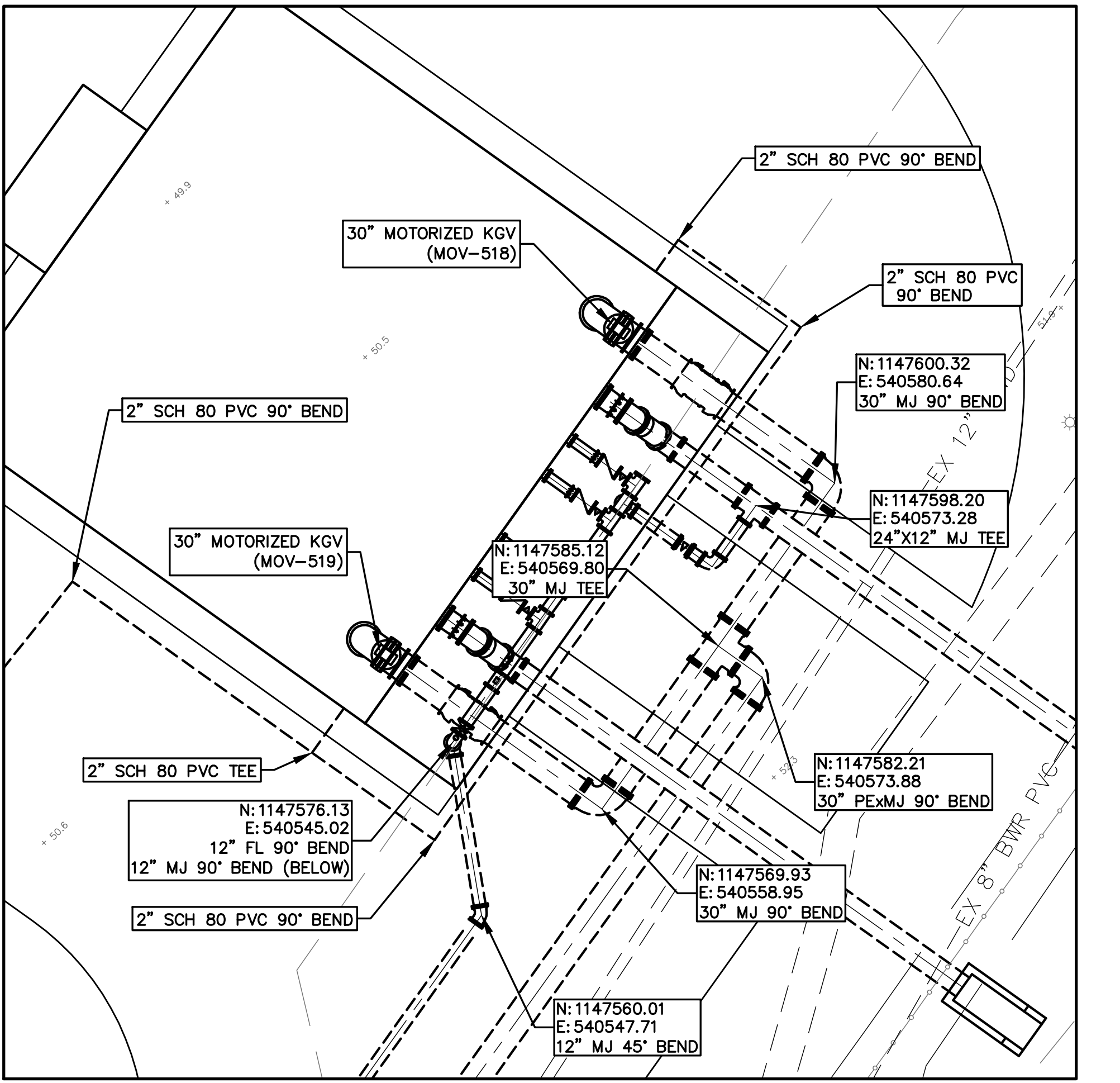
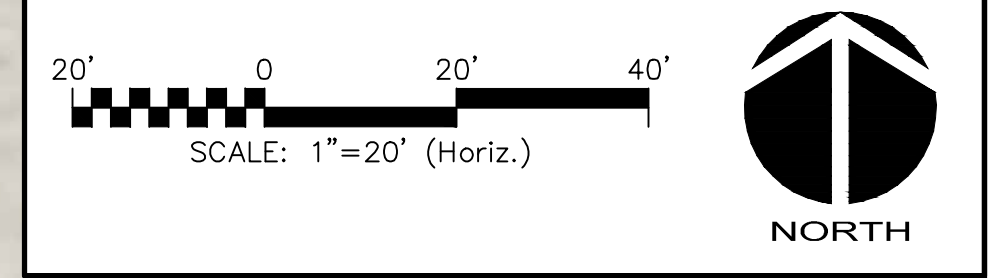


**MANATEE COUNTY
 WTP BIOLOGICAL TREATMENT UNIT**

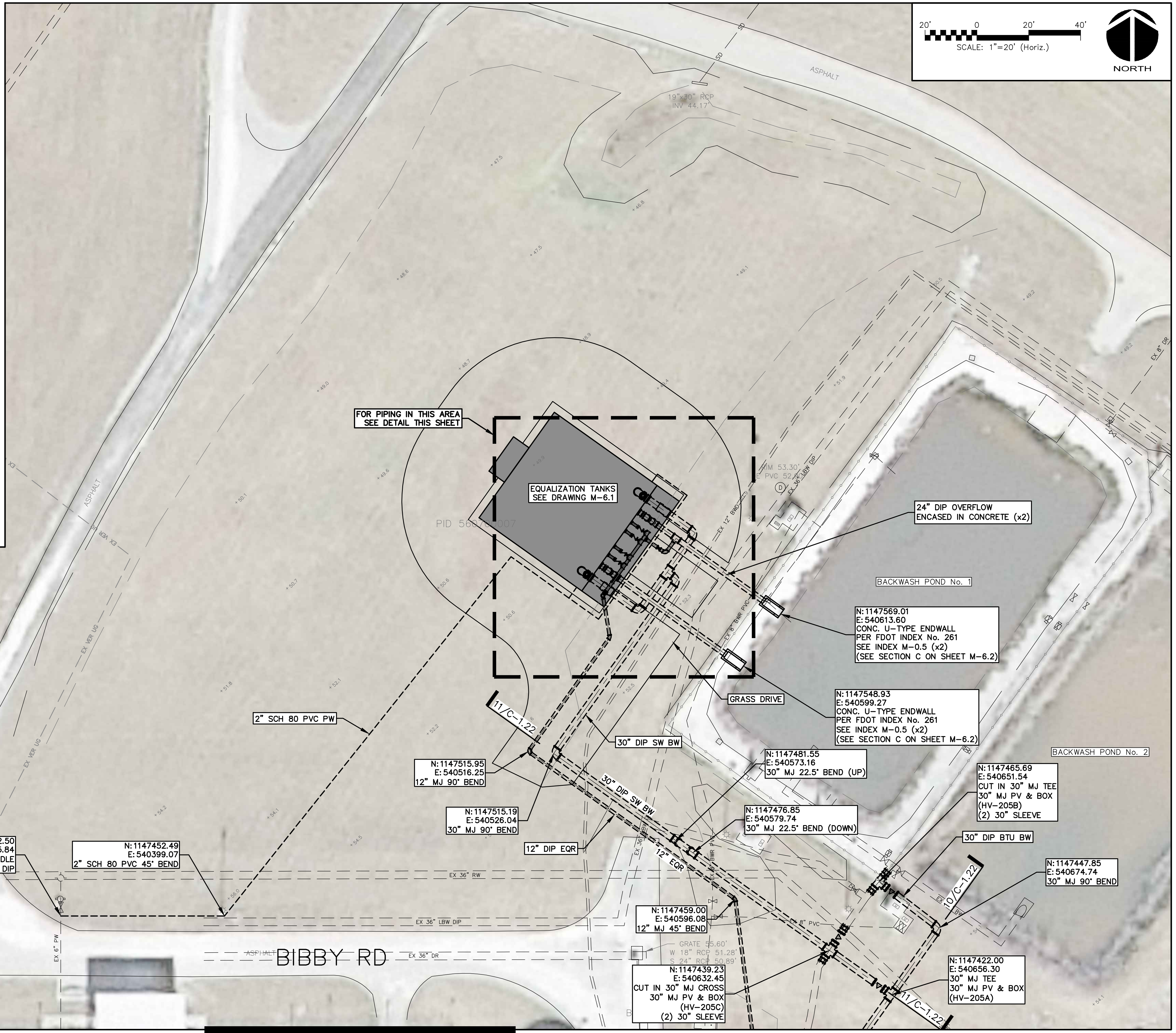
YARD PIPING PLAN 4 OF 5

DATE: OCTOBER 2015	SCALE: 1" = 20'	DRAWING NUMBER: C-1.13
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DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR: P.J.		
STATUS: ISSUE FOR BID		

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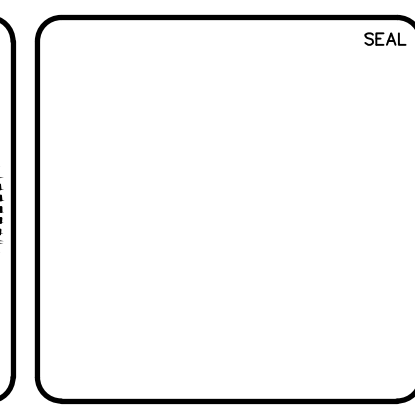
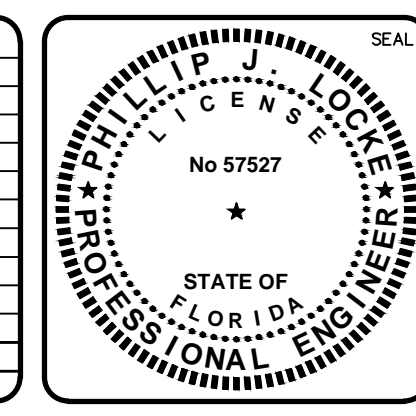
EQUILIZATION TANK PIPING DETAIL



MATCHLINE - SEE SHEET C-1.13

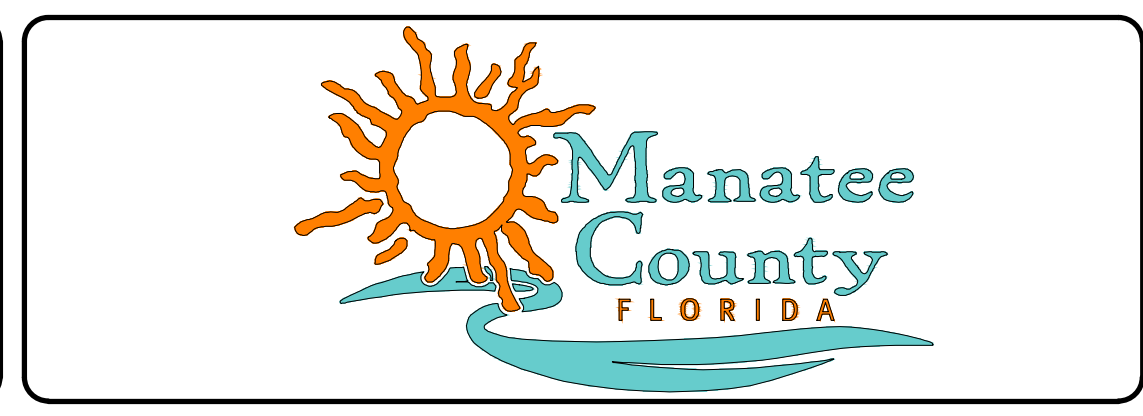
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REVNO.	DESCRIPTIONS	DATE



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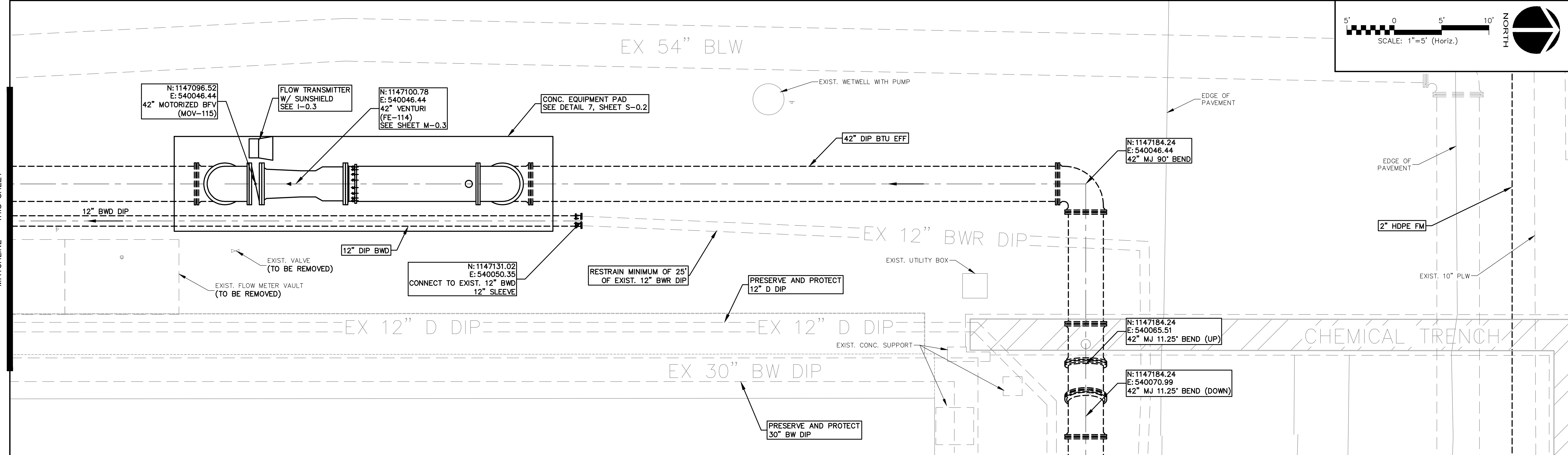
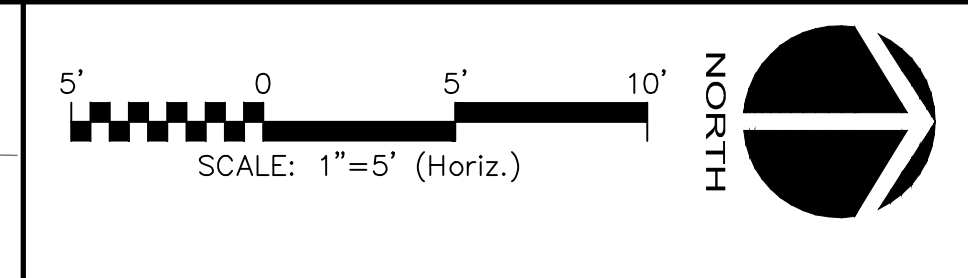
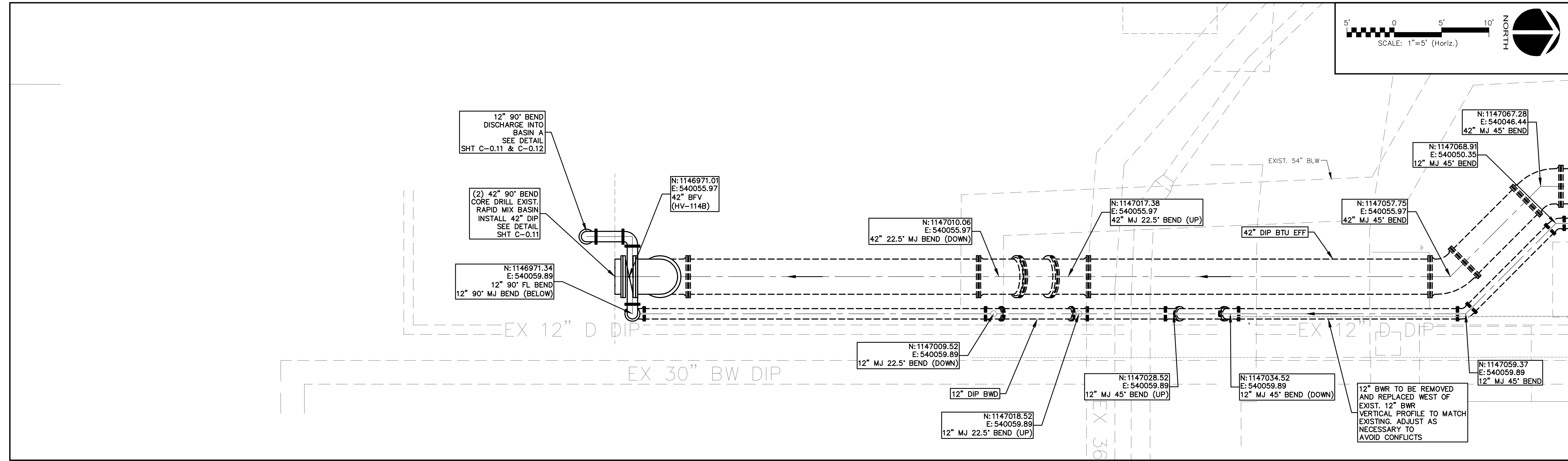
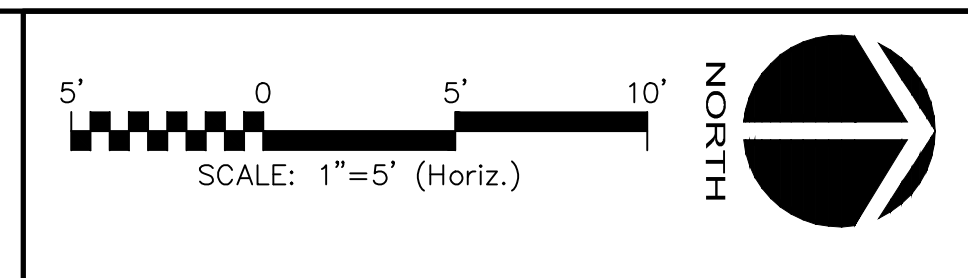
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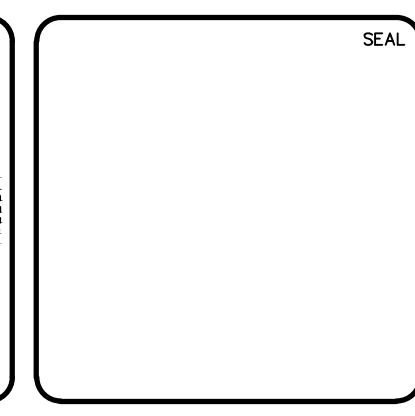
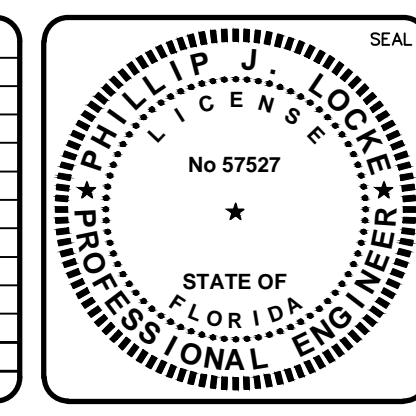
YARD PIPING PLAN 5 OF 5

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DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR. P.J.		
ISSUE FOR BID		

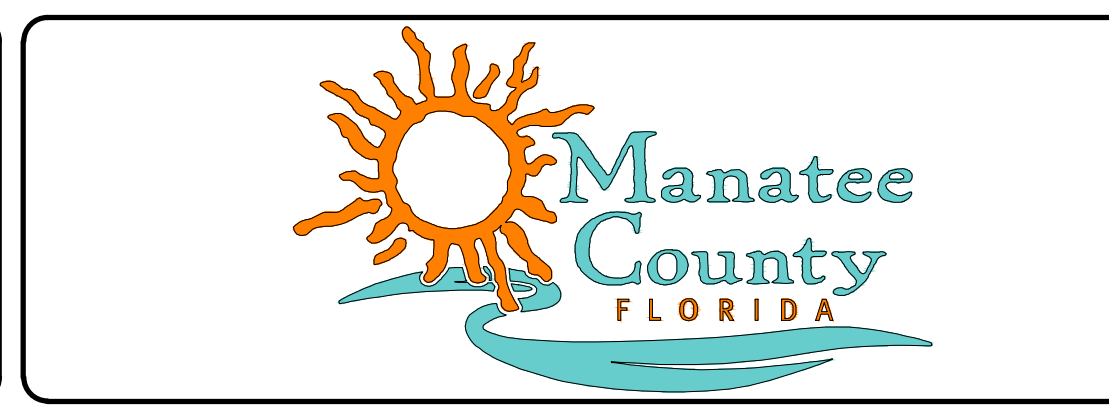


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REV. NO.	DESCRIPTIONS	DATE

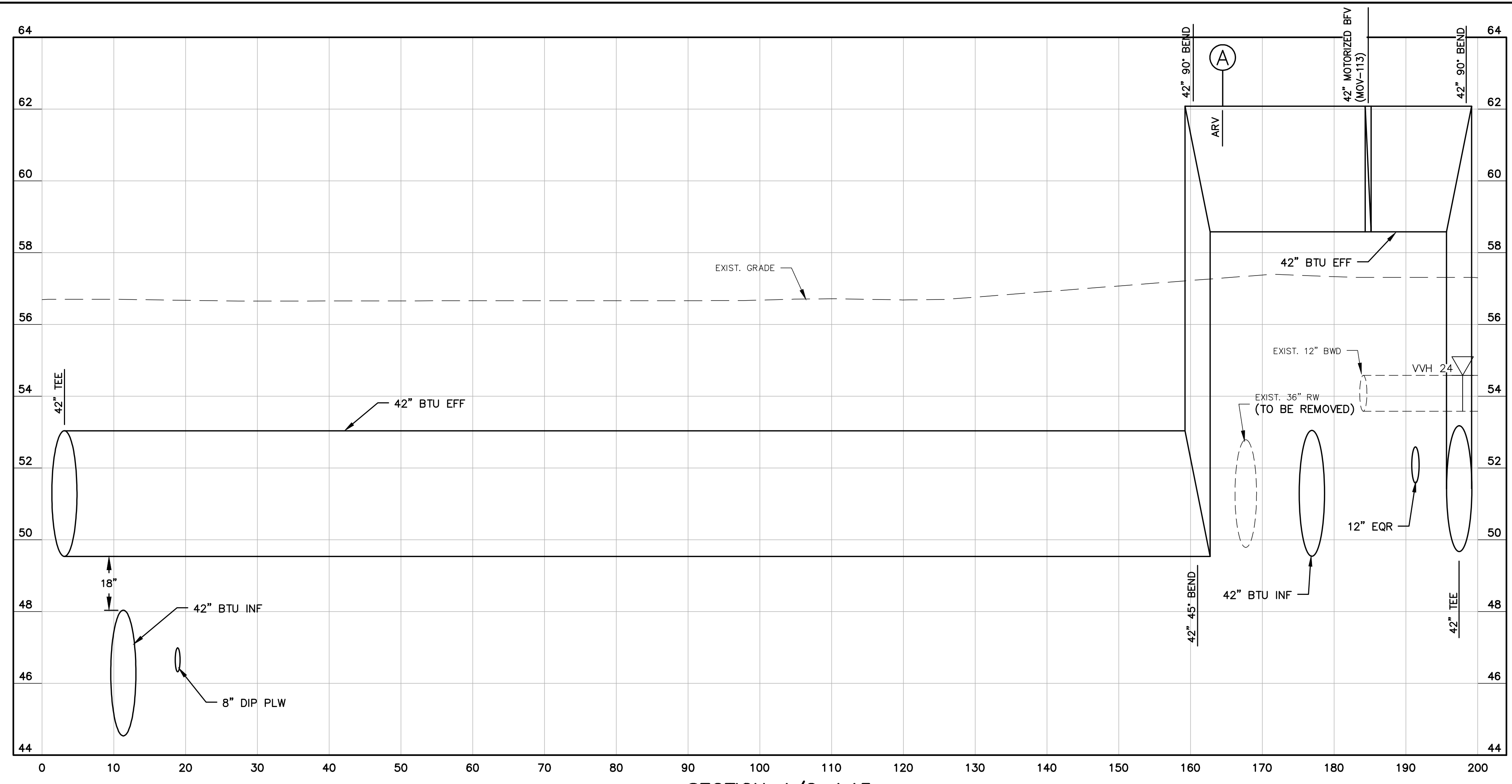


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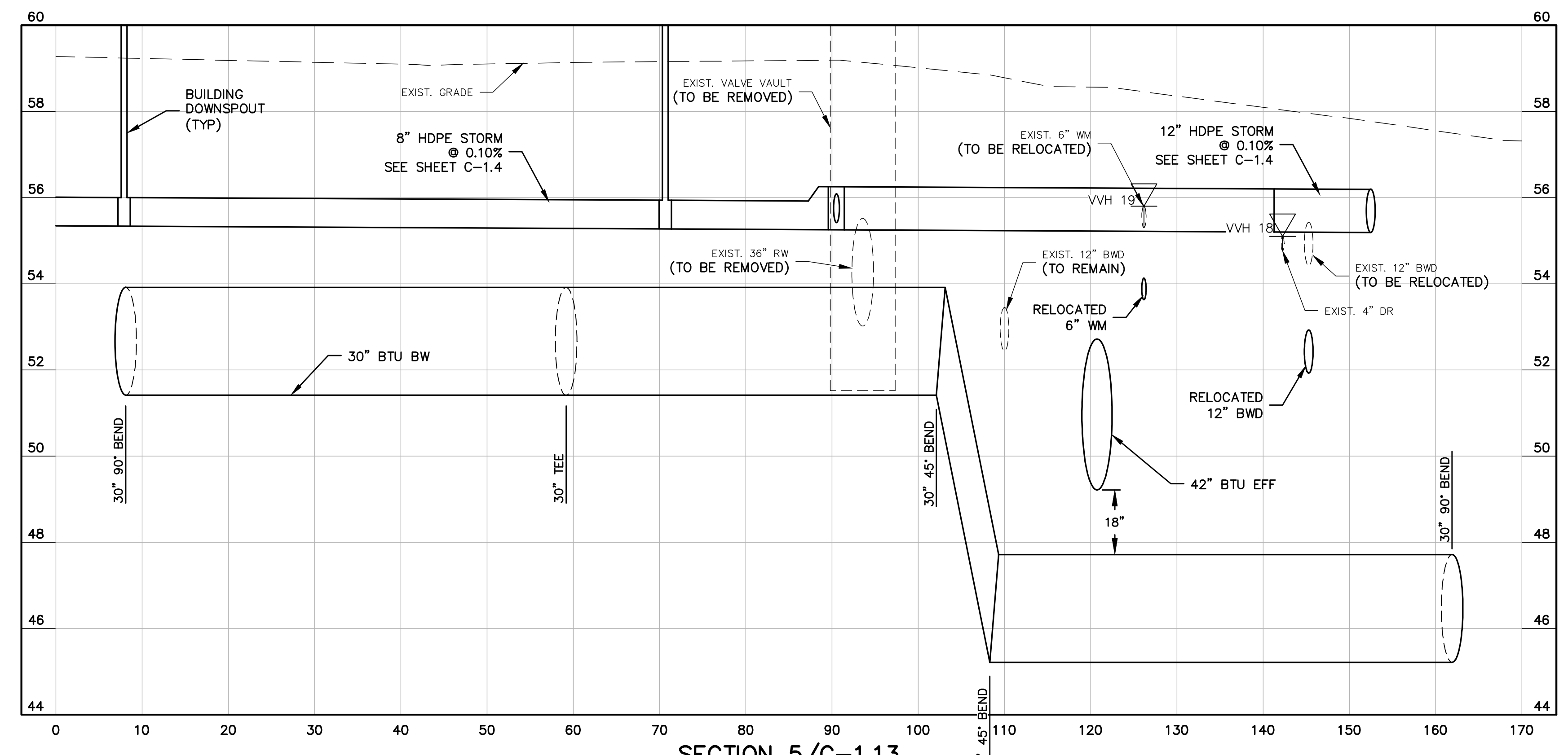


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BASIN A INFLUENT PIPING DETAIL PLAN

DATE: OCTOBER 2015	SCALE: 1" = 5'	DRAWING NUMBER: C-1.15
MCE PROJ. # 1024-0167	HORIZONTAL: NA	REVISION:
DRAWN: BFN	VERTICAL: NA	
DESIGNED: BP		
CHECKED: JSL		
PROJ. MGR. P.J.		
STATUS: ISSUE FOR BID		



SECTION 4/C-1.13
 SCALE: 1" = 10' H
 1" = 2' V

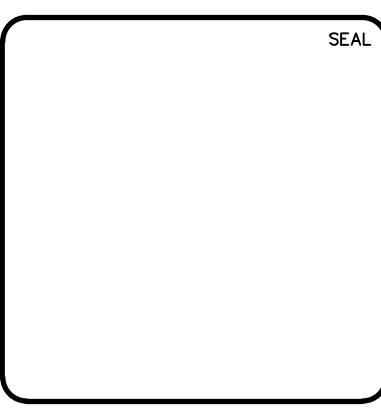
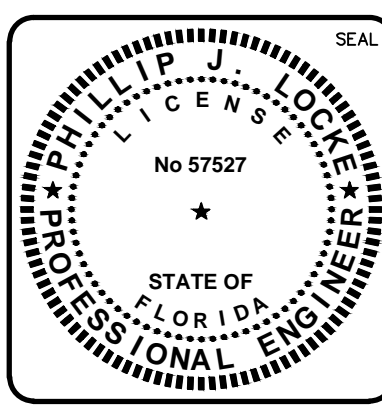


SECTION 5/C-1.13
 SCALE: 1" = 10' H
 1" = 2' V

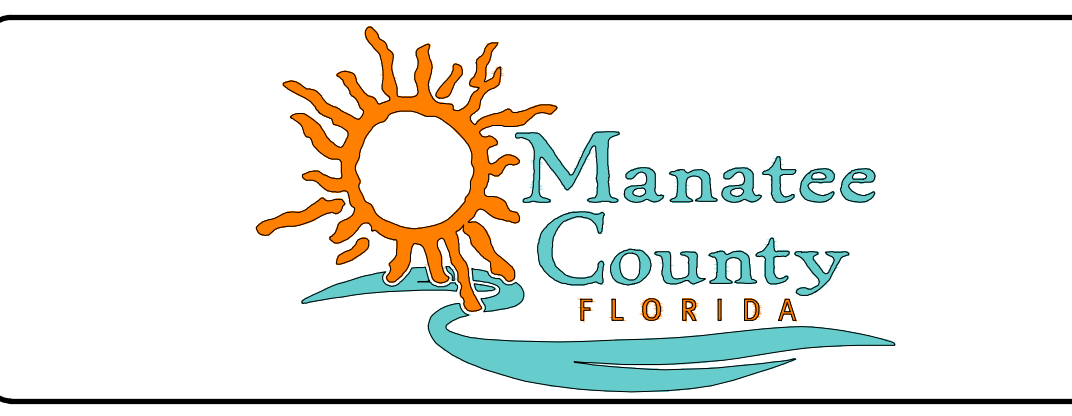
NOTE:
 ADJUST SLOPE OF HDPE STORM PIPE
 TO PROVIDE CLEARANCE OVER EXIST.
 4" DR (IF NECESSARY).

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REV. NO.	DESCRIPTIONS	DATE



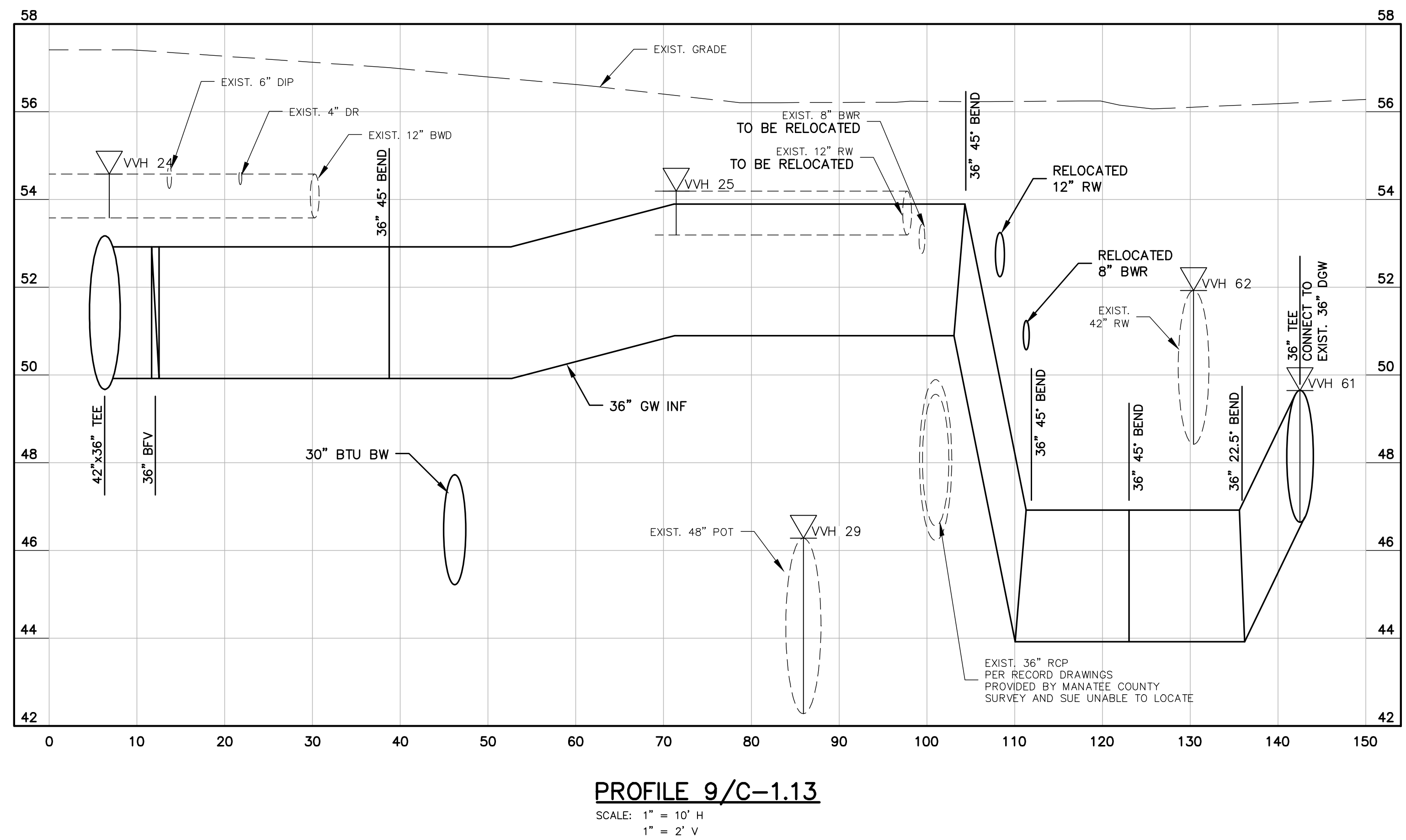
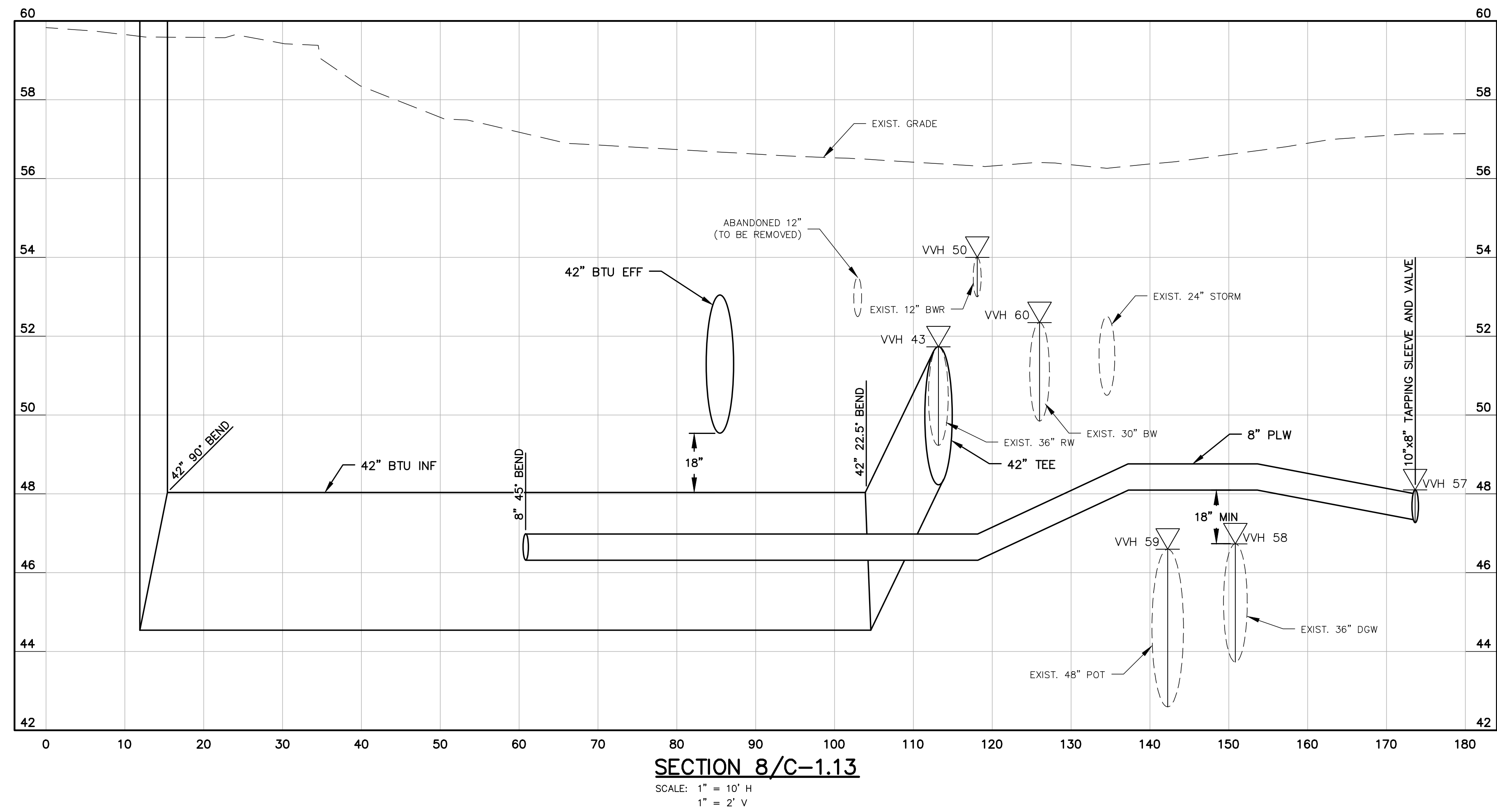
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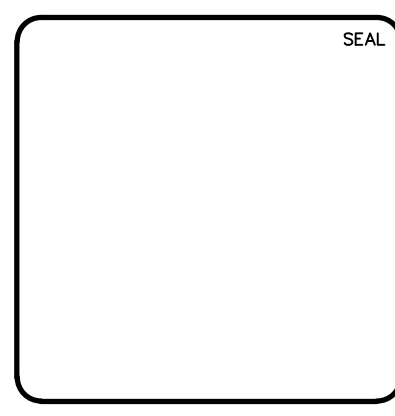
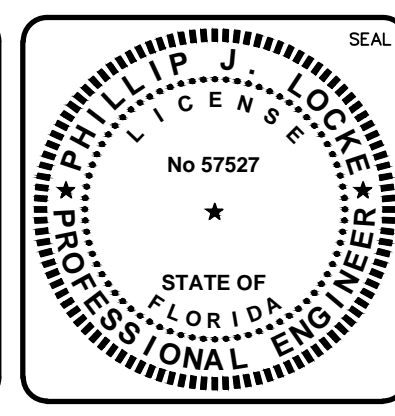
YARD PIPING SECTIONS
3 OF 6

DATE: OCTOBER 2015	SCALE: 1" = 10' H 1" = 2' V	DRAWING NUMBER: C-1.19
MCE PROJ. # 1024-0167	DESIGNED: BFN	REVISION:
CHECKED: JSL	PROJ. MGR. P.J.	
ISSUE FOR BID		

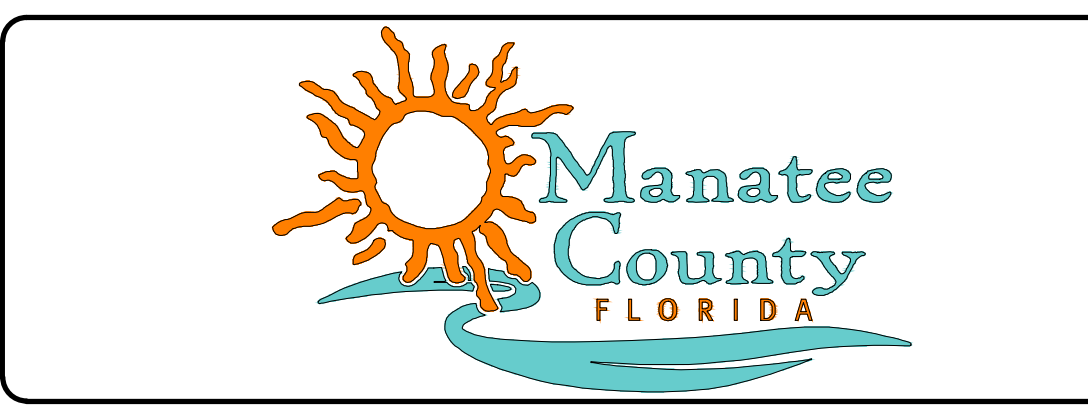


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REV. NO.	DESCRIPTIONS	DATE



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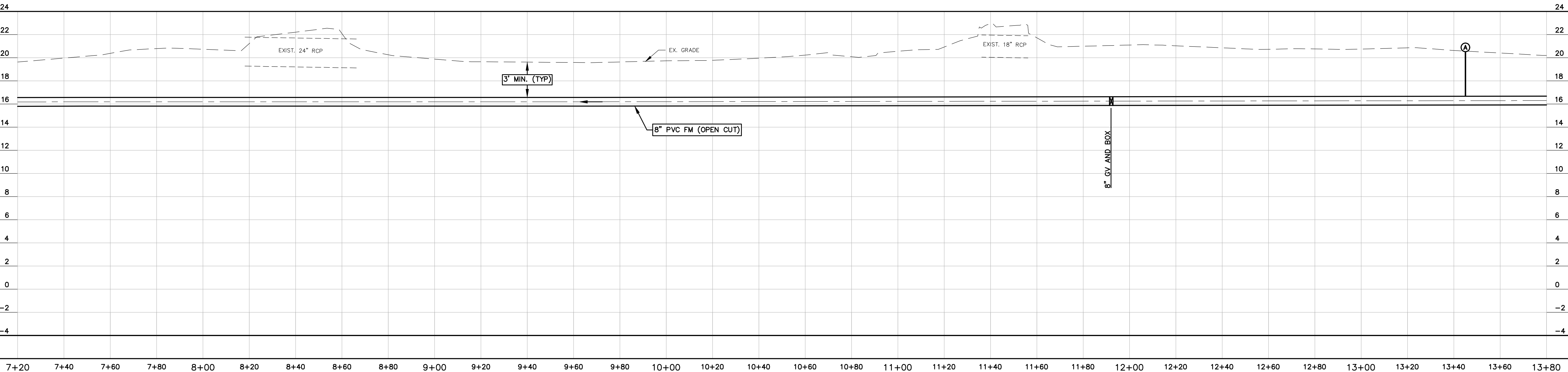
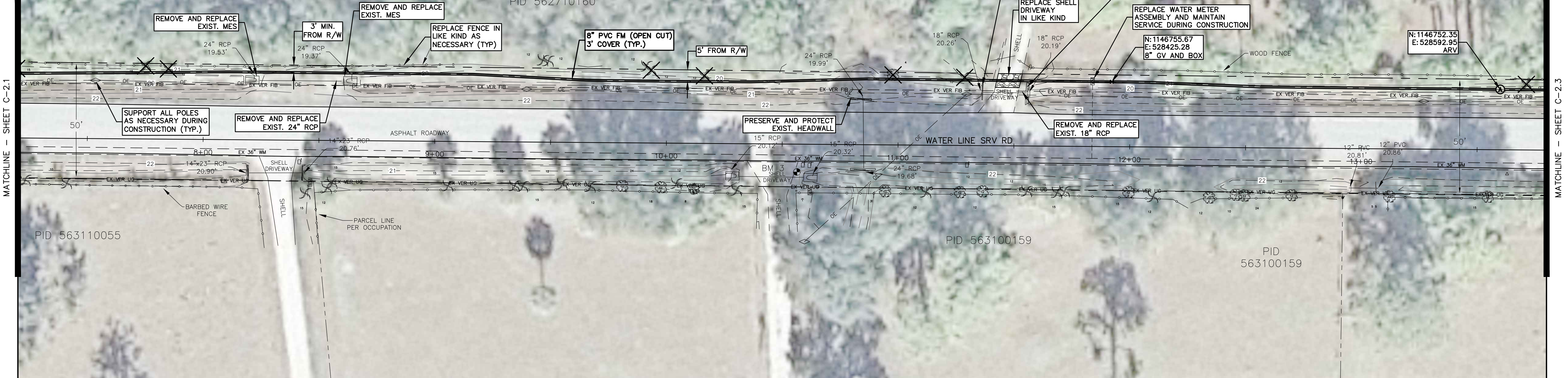
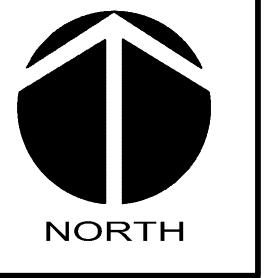
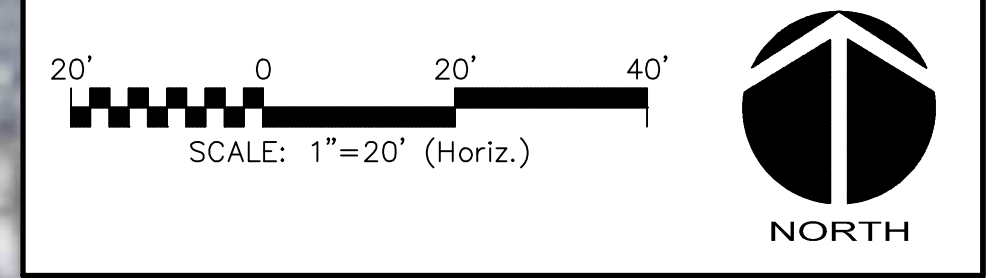


MANATEE COUNTY
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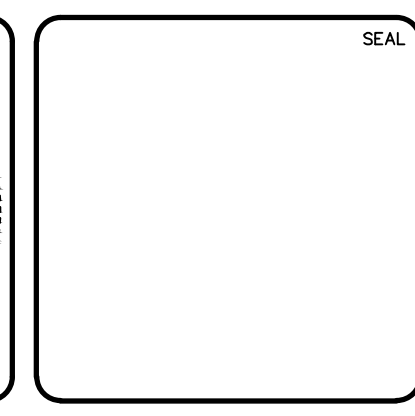
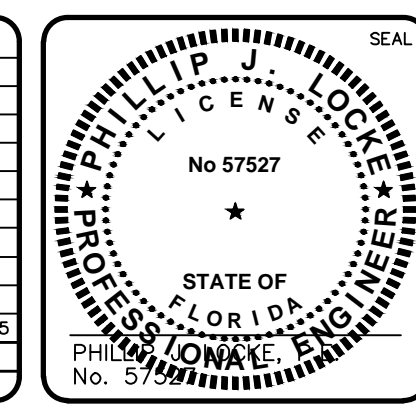
YARD PIPING SECTIONS
5 OF 6

DATE: OCTOBER 2015	SCALE: 1" = 10' H, 1" = 2' V	DRAWING NUMBER: C-1.21
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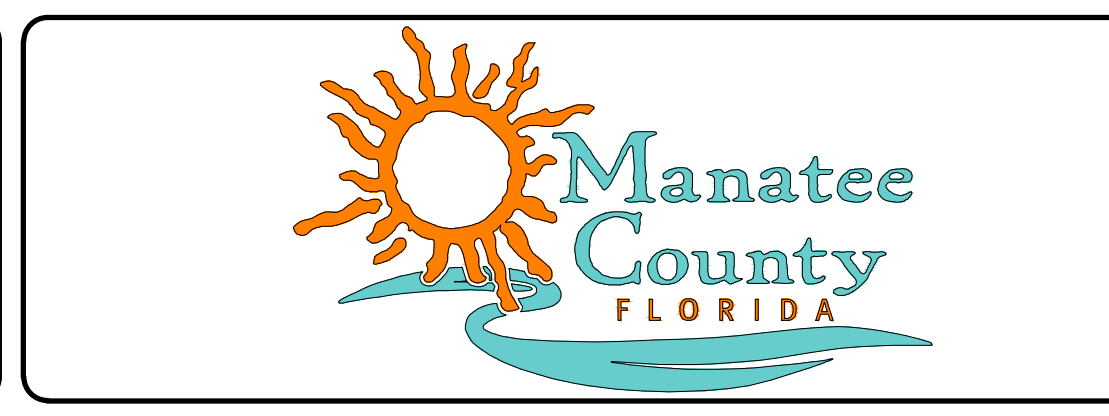
- NOTES:**
1. DEFLECT FORCEMAIN AS NECESSARY.
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 3. ALL DRAINAGE PIPE AND STRUCTURES REPLACED SHALL MEET CURRENT FOOT STANDARDS.
 4. ROOT BARRIER SYSTEM SHALL BE INSTALLED ADJACENT TO ALL TREES ON PRIVATE PROPERTY THAT ARE WITHIN 10' OF INSTALLED PIPELINE, WITH THE EXCEPTION OF PALMS. THE ROOT BARRIER SYSTEM IS REQUIRED FOR PALMS WITHIN 6' OF INSTALLED PIPELINE. SEE DETAIL C-0.9
 5. THE CONTRACTOR SHALL INSTALL THE FORCEMAIN IN CASING ANYWHERE THAT THE EXISTING AND/OR REPLACED STORMWATER PIPE IS PARALLEL AND LESS THAN 5' HORIZONTALLY FROM THE OUTSIDE OF EACH PIPE. THE CASING SHALL EXTEND BEYOND THE STORMWATER STRUCTURES EQUAL TO THE COVER OVER THE FORCEMAIN. SEE FORCEMAIN WITHIN 5' OF PARALLEL STORMWATER DETAIL ON SHEET C-0.6.



REV. NO.	DESCRIPTION	DATE
A	REVISED PER COUNTY COMMENTS	10-08-2015



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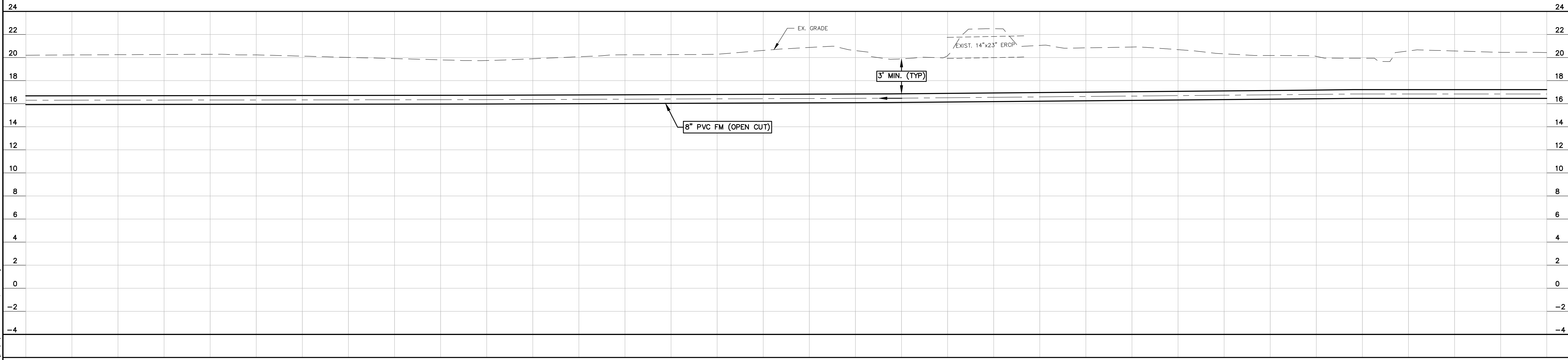
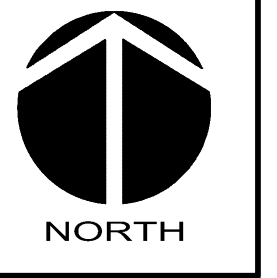
MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

FORCEMAIN PLAN AND PROFILE
 2 OF 19

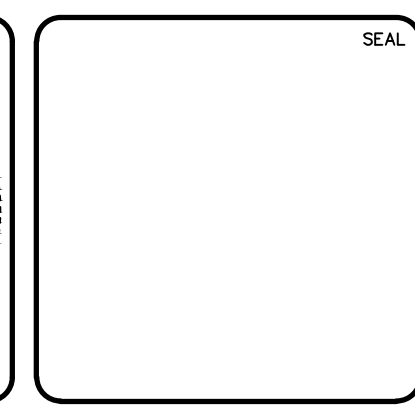
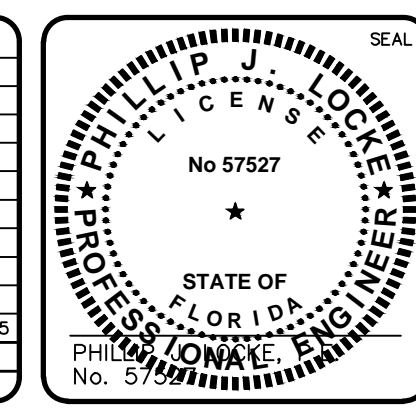
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DRAWN: BFN	DESIGNED: MN	CHECKED: JSL
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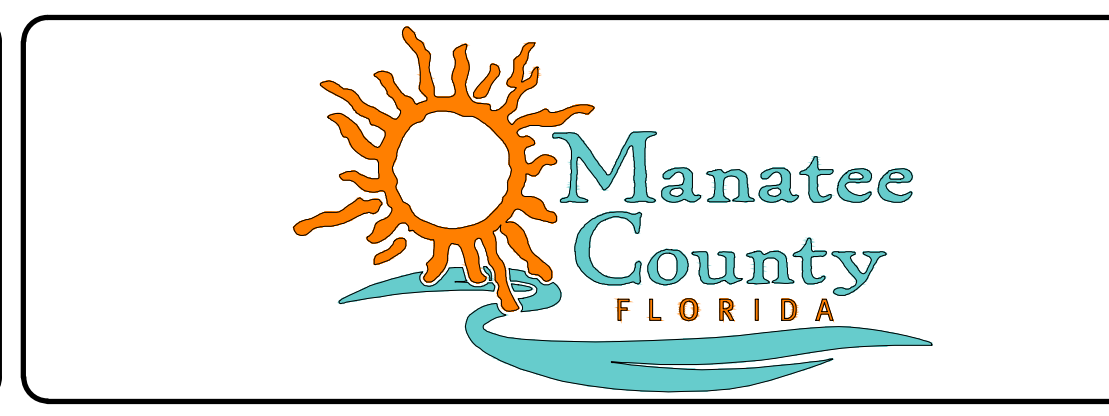
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A	REVISED PER COUNTY COMMENTS	10-08-2015



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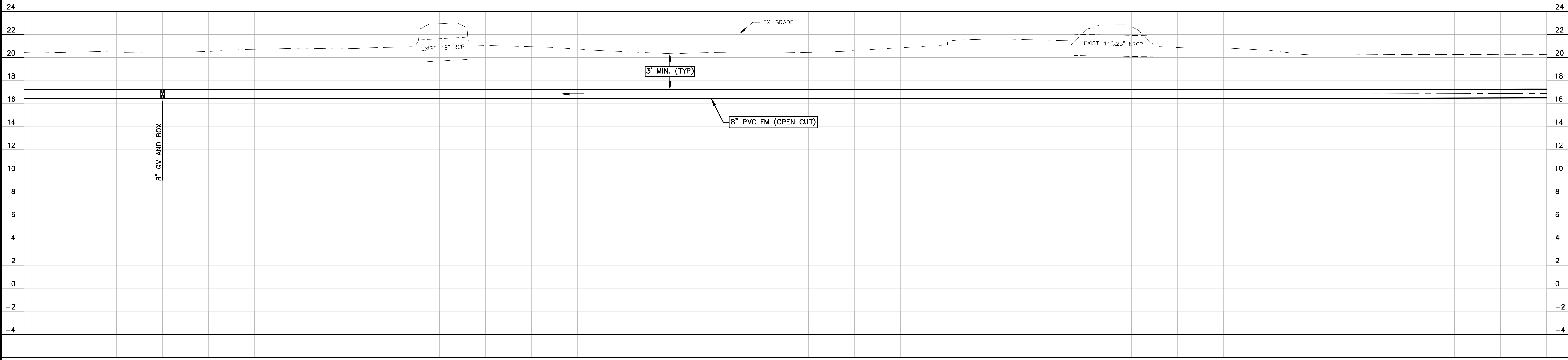
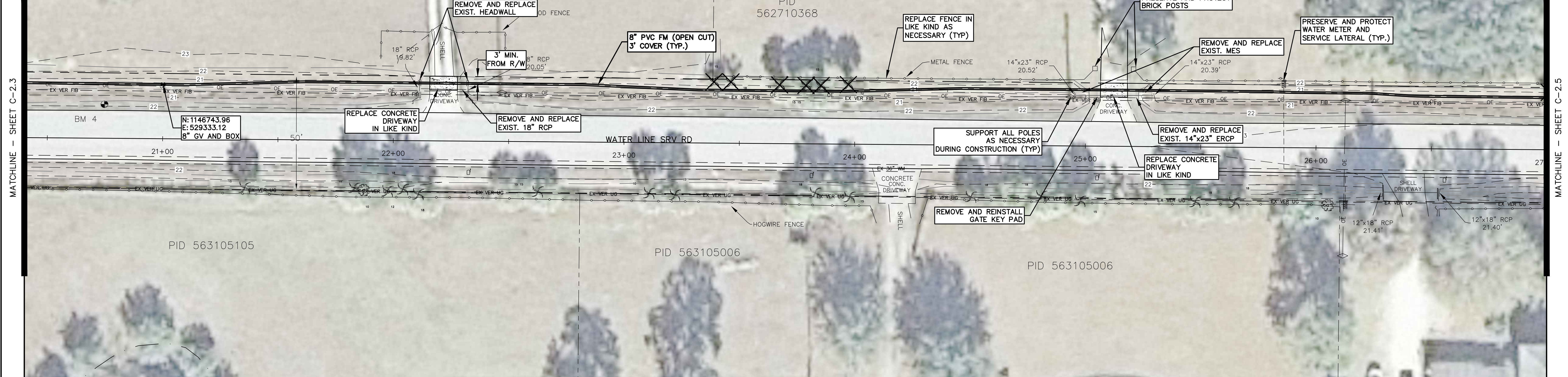
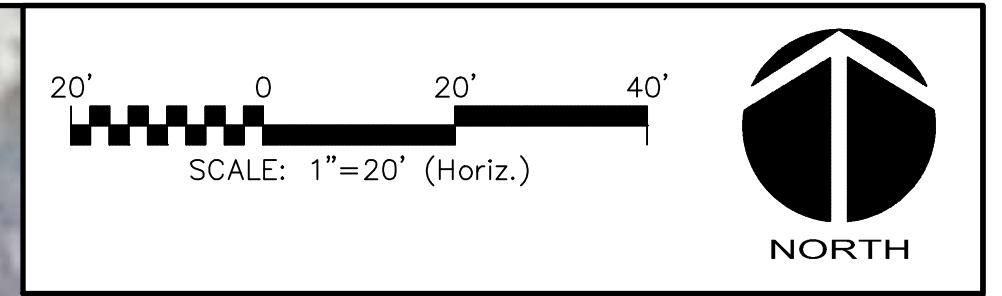
MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

FORCEMAIN PLAN AND PROFILE
3 OF 19

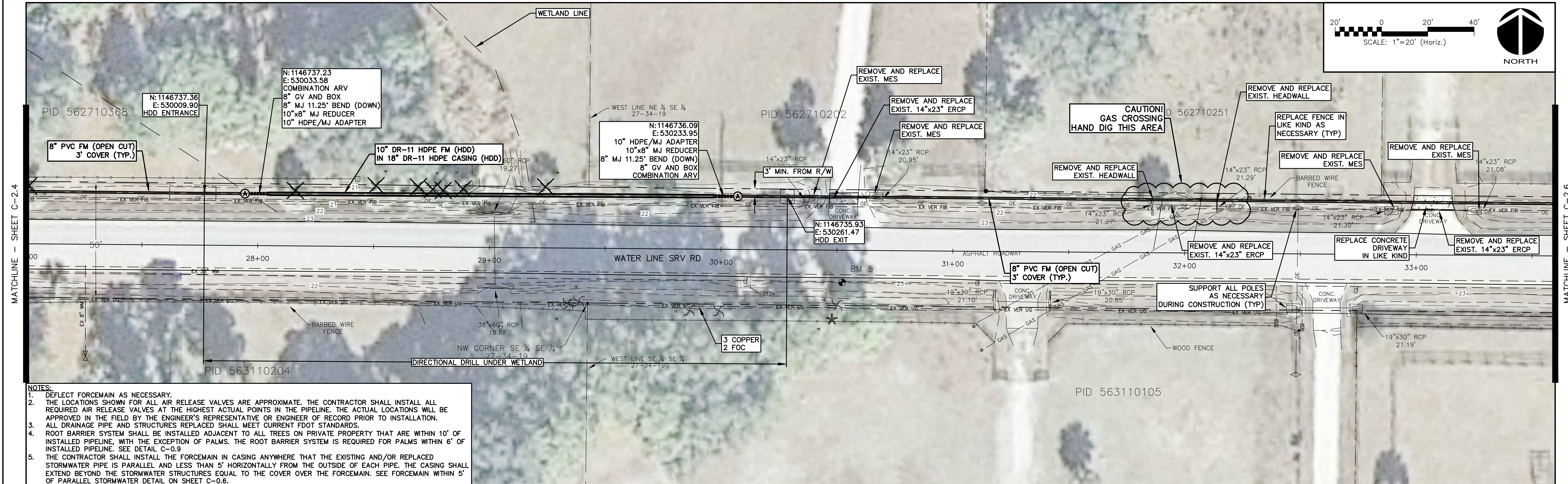
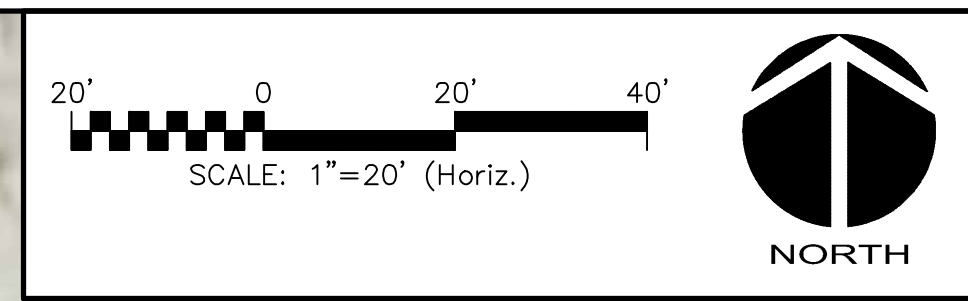
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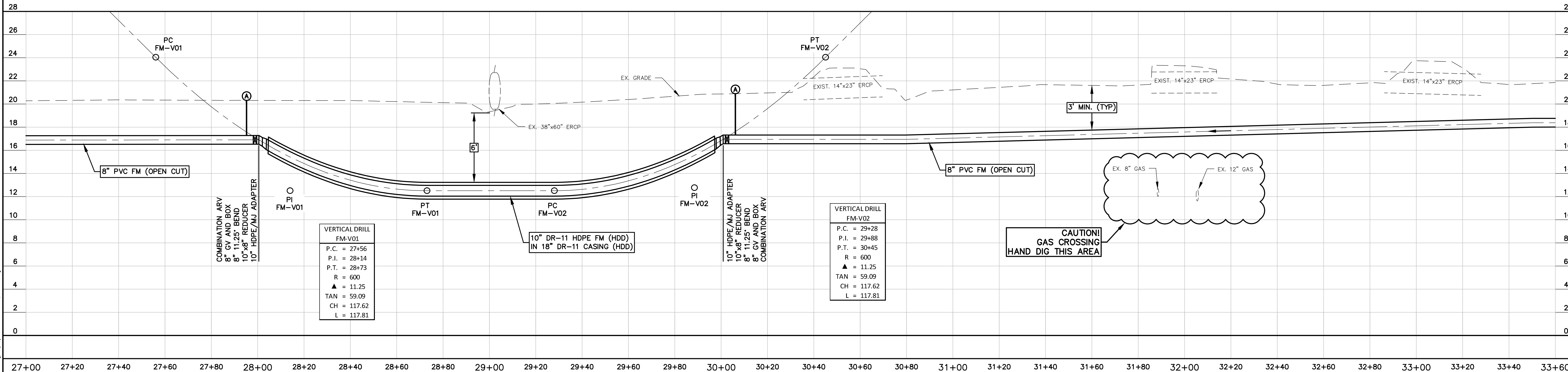
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		<p>1365 Hamlet Avenue Clearwater, Florida 33756 Phone: (727)442-7196, Fax: (727)461-3827 CA Lic. No. 29588 www.mckimcreed.com</p>		<p>MANATEE COUNTY WTP BIOLOGICAL TREATMENT UNIT</p> <p>FORCEMAIN PLAN AND PROFILE 4 OF 19</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>DATE:</td> <td>OCTOBER 2015</td> <td>SCALE:</td> <td rowspan="4" style="text-align: center;"> HORIZONTAL: 1" = 20' VERTICAL: 1" = 4' </td> </tr> <tr> <td>MCE PROJ. #</td> <td>1024-0167</td> <td>DRAWN:</td> <td>BFN</td> </tr> <tr> <td>DESIGNED:</td> <td>MN</td> <td>CHECKED:</td> <td>JSL</td> </tr> <tr> <td>PROJ. MGR.</td> <td>PJL</td> <td></td> <td></td> </tr> </table>	DATE:	OCTOBER 2015	SCALE:	HORIZONTAL: 1" = 20' VERTICAL: 1" = 4'	MCE PROJ. #	1024-0167	DRAWN:	BFN	DESIGNED:	MN	CHECKED:	JSL	PROJ. MGR.	PJL																																						
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VERTICAL DRILL FM-V01

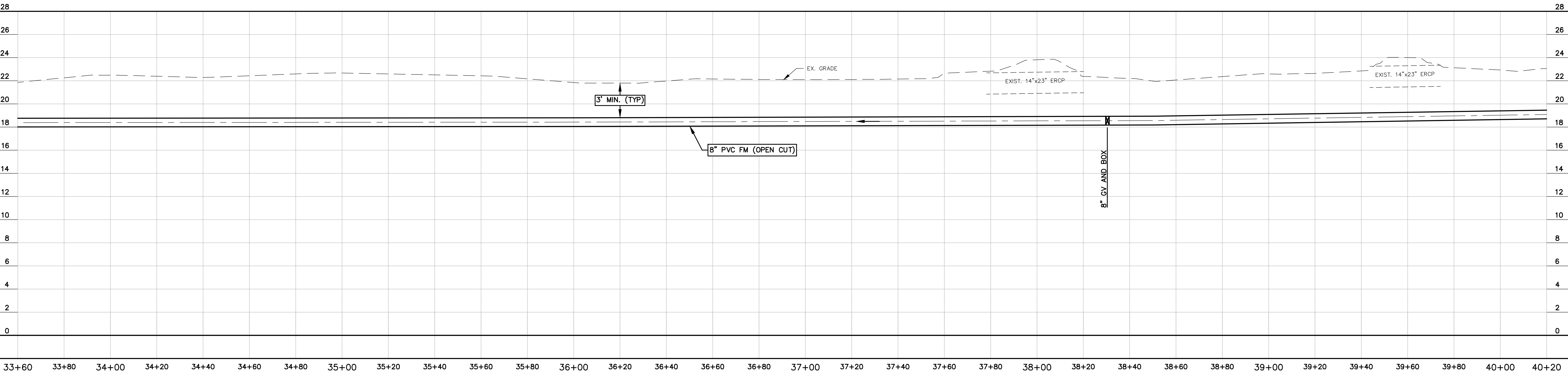
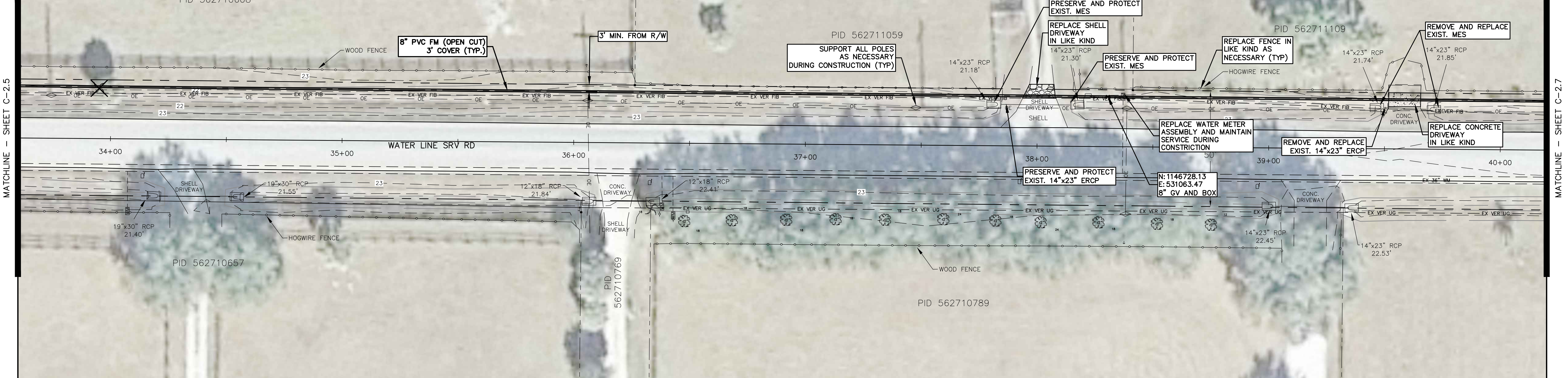
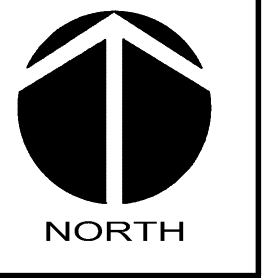
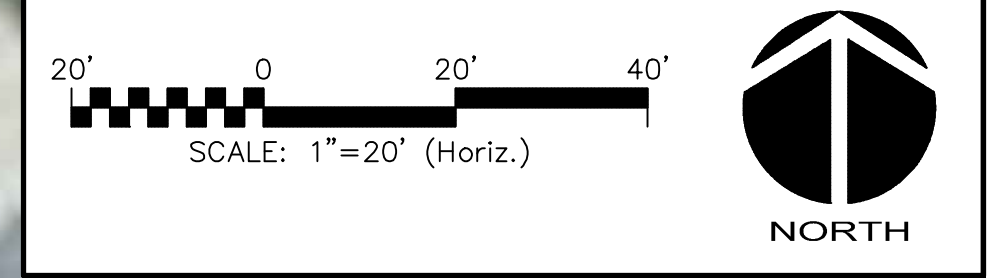
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P.I.	= 28+14
P.T.	= 28+73
R	= 600
▲	= 11.25
TAN	= 59.09
CH	= 117.62
L	= 117.81

VERTICAL DRILL FM-V02

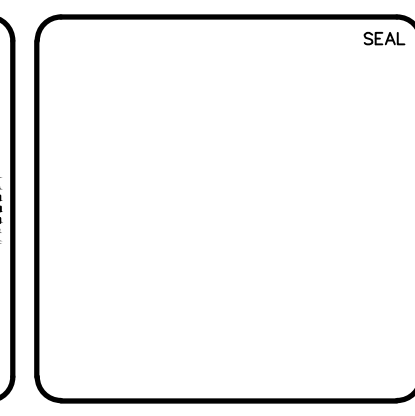
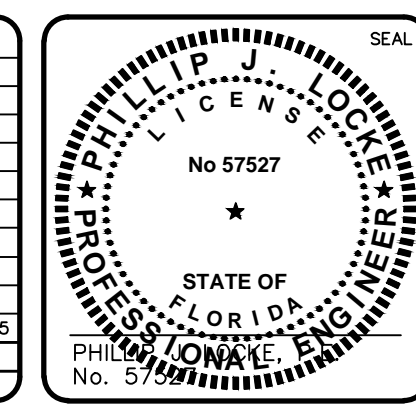
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P.I.	= 29+88
P.T.	= 30+45
R	= 600
▲	= 11.25
TAN	= 59.09
CH	= 117.62
L	= 117.81

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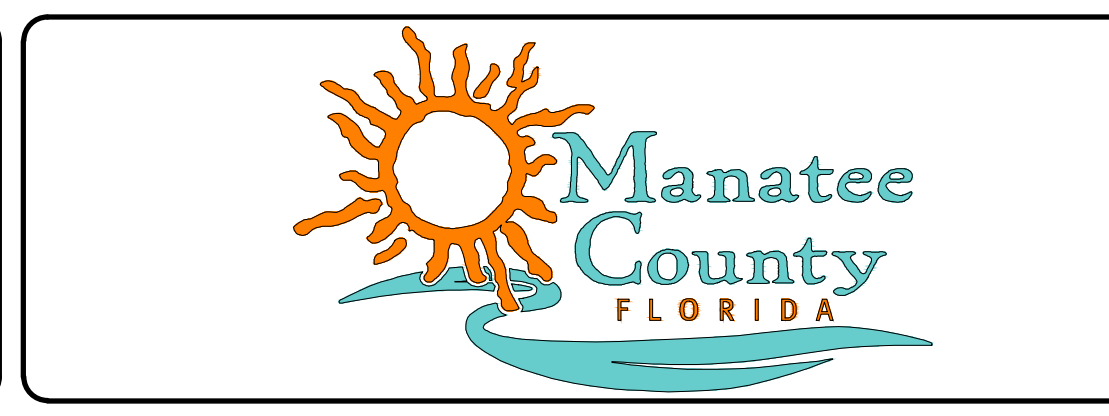
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REV. NO.	DESCRIPTION	DATE
A	REVISED PER COUNTY COMMENTS	10-08-2015



MCKIM & CREED
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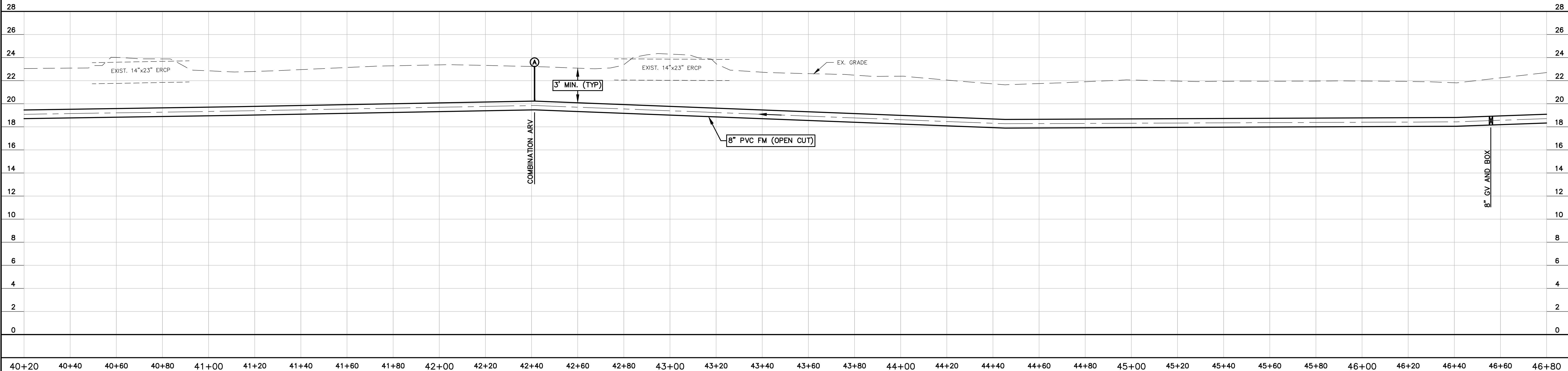
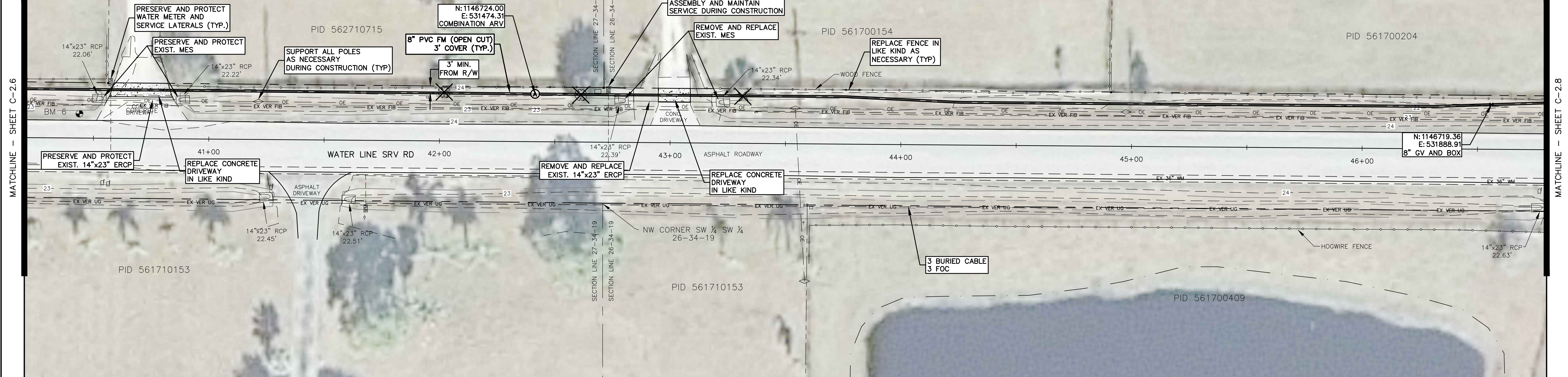
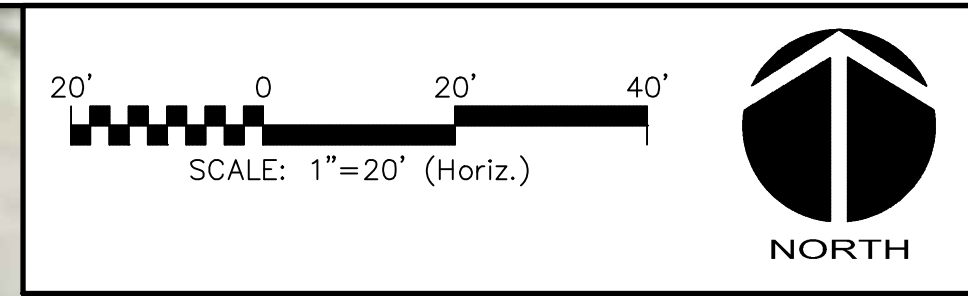
MANATEE COUNTY
WTP BIOLOGICAL TREATMENT UNIT

FORCEMAIN PLAN AND PROFILE
 6 OF 19

DATE: OCTOBER 2015	SCALE: 1" = 20' (Horizontal), 1" = 4' (Vertical)	DRAWING NUMBER: C-2.6
MCE PROJ. # 1024-0167	DRAWN: BFN	DESIGNED: MN
CHECKED: JSL	PROJ. MGR: P.J.	STATUS: ISSUE FOR BID

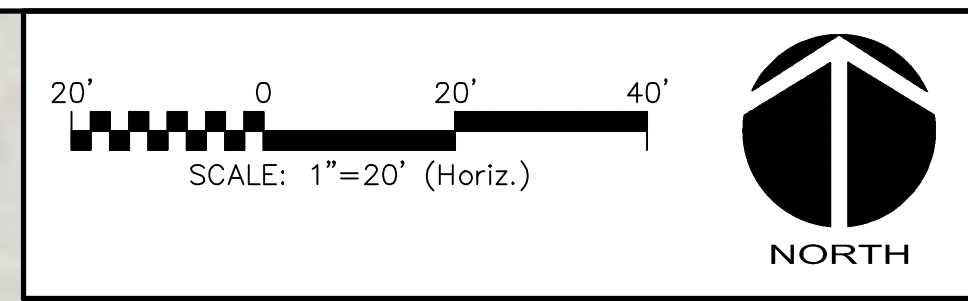
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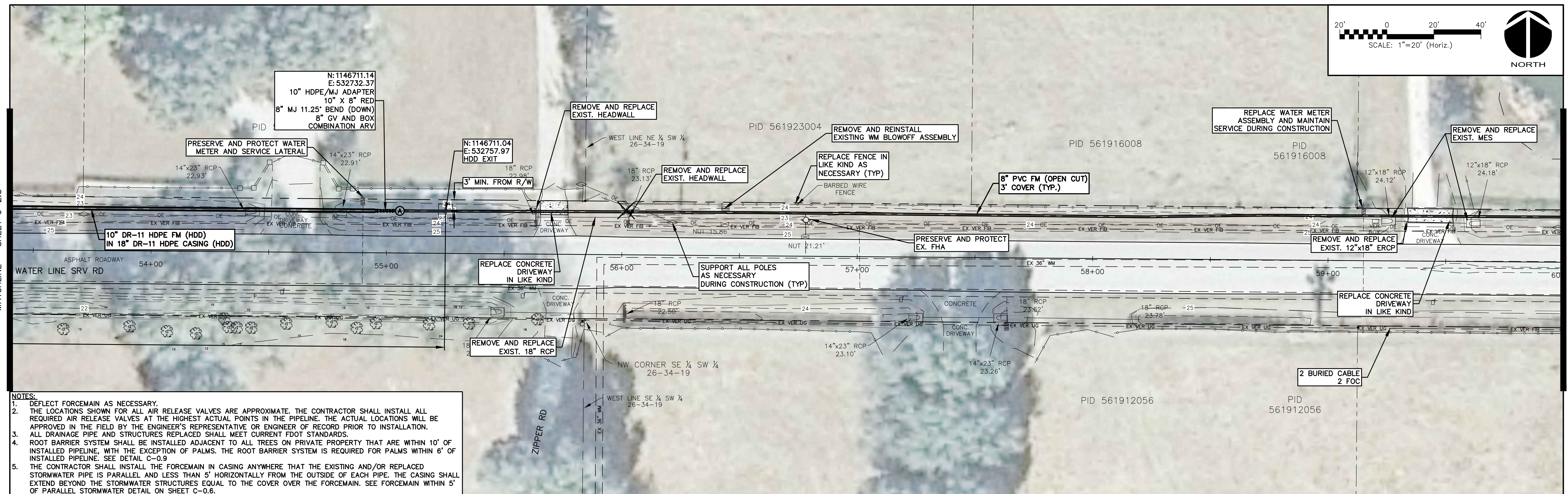
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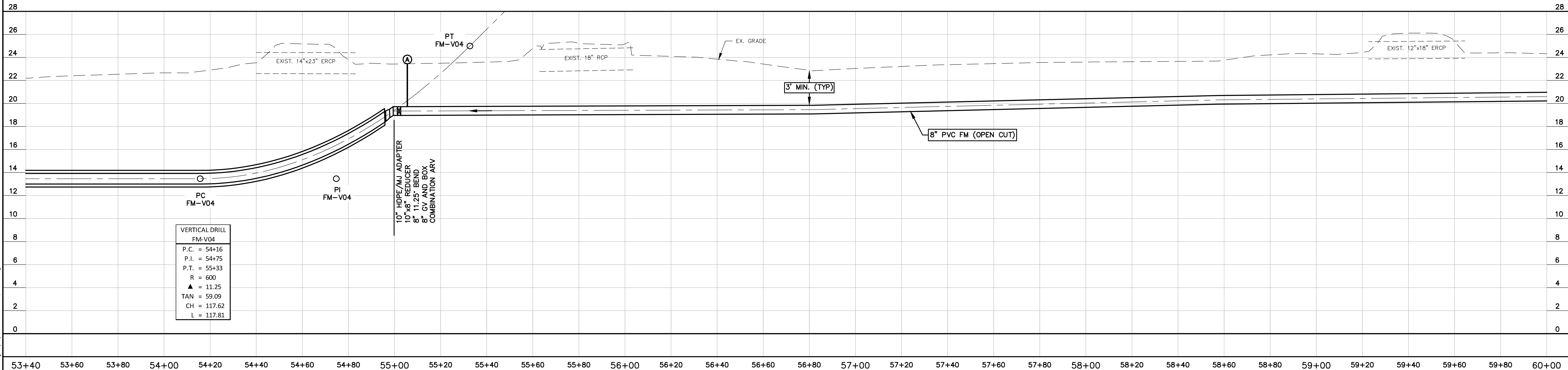


MATCHLINE - SHEET C-2.8

MATCHLINE - SHEET C-2.10



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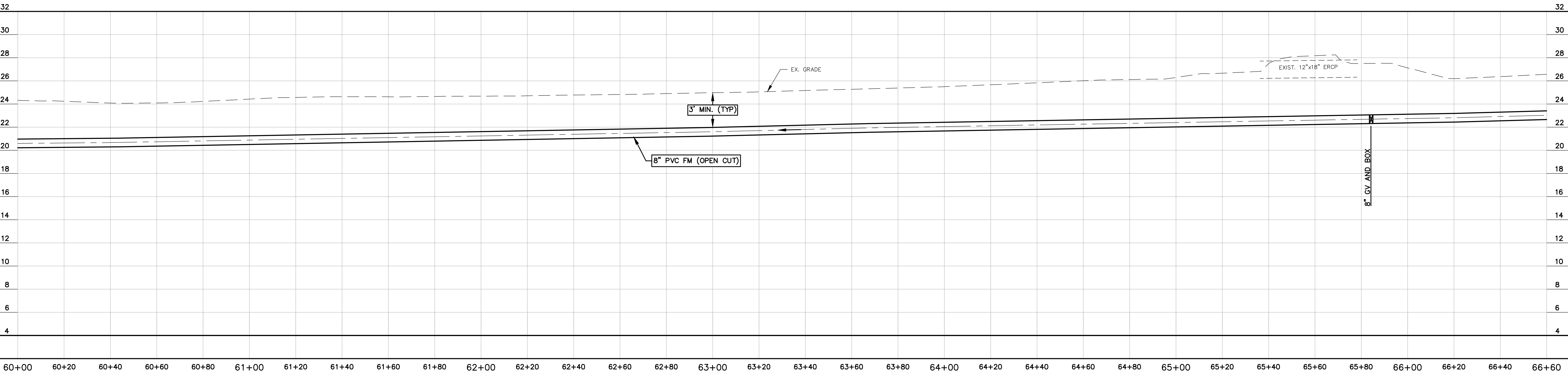
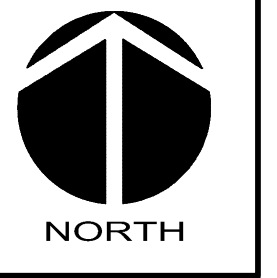


VERTICAL DRILL FM-V04	
P.C.	= 54+16
P.I.	= 54+75
P.T.	= 55+33
R	= 600
▲	= 11.25
TAN	= 59.09
CH	= 117.62
L	= 117.81

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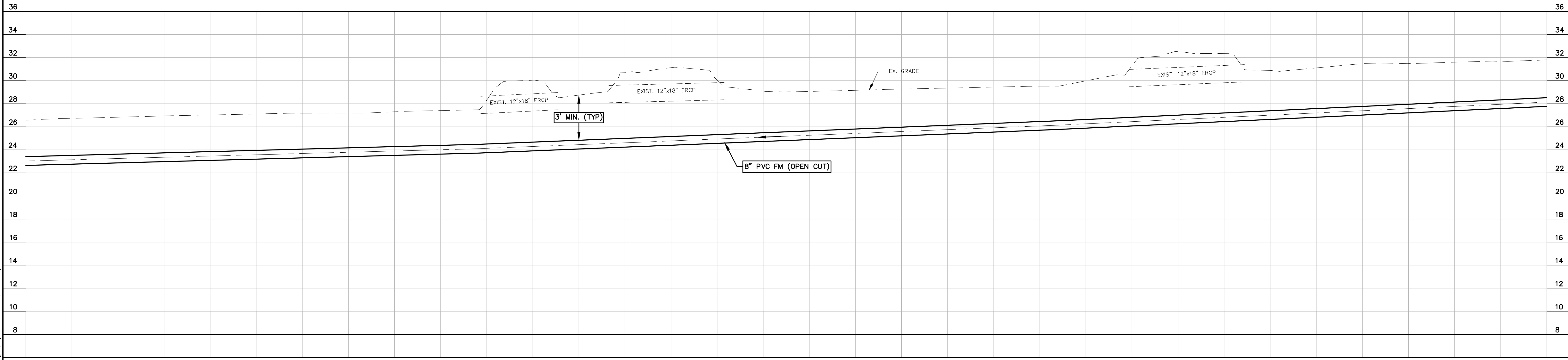
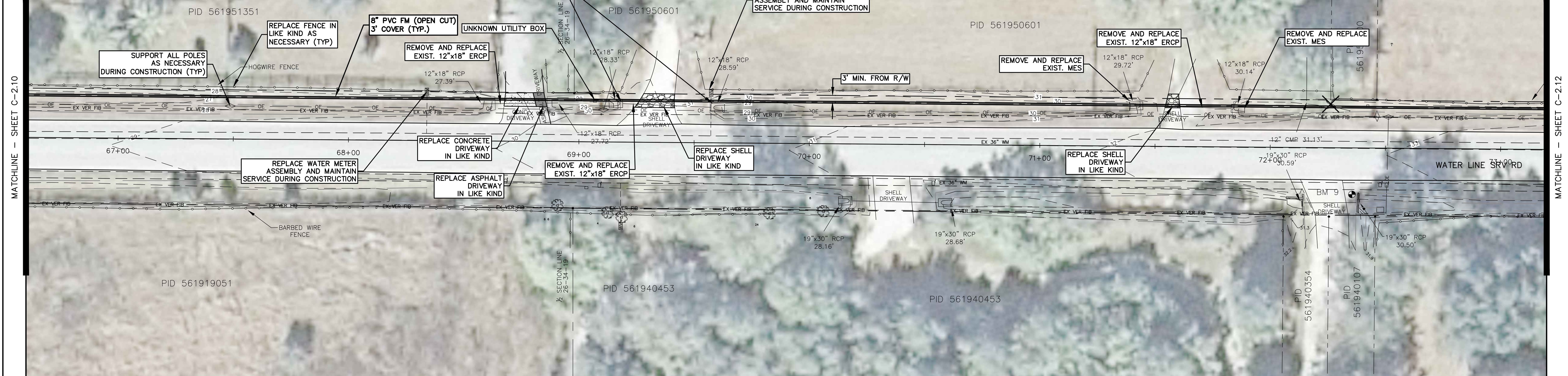
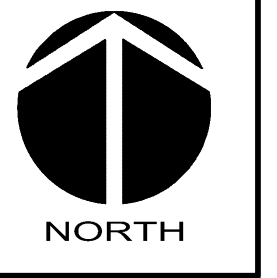
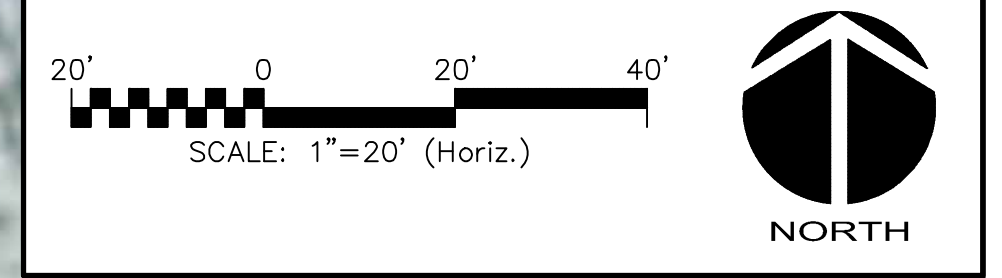
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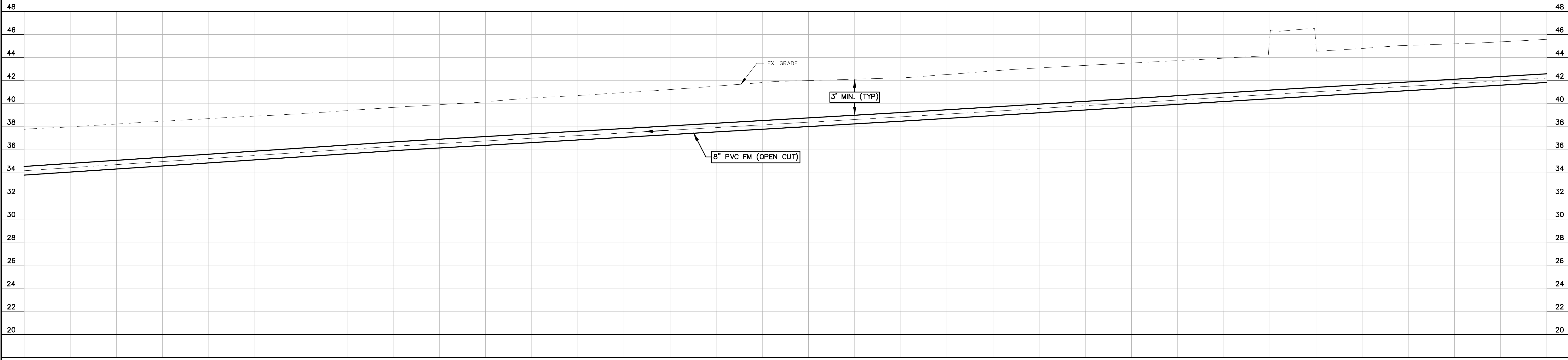
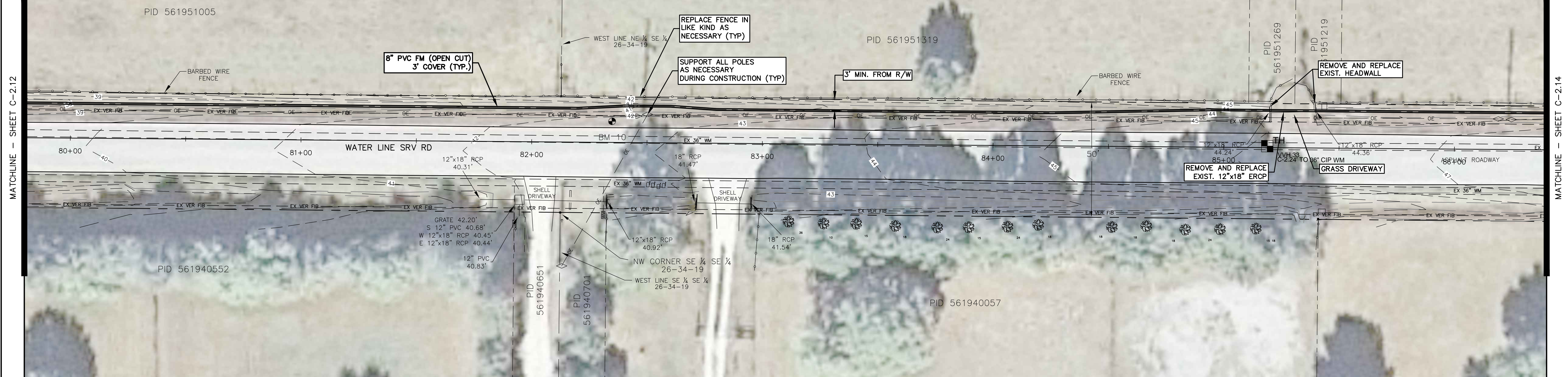
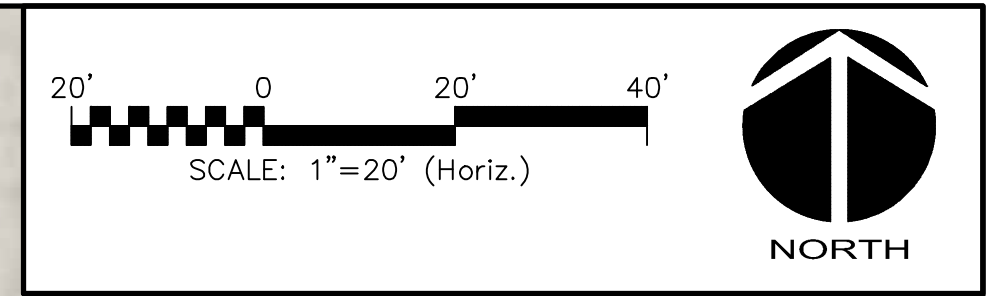
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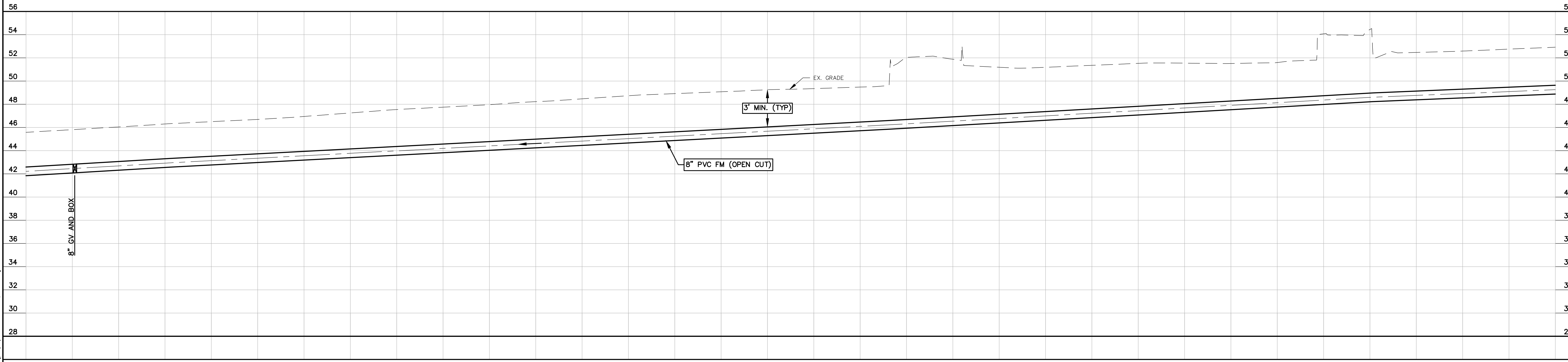
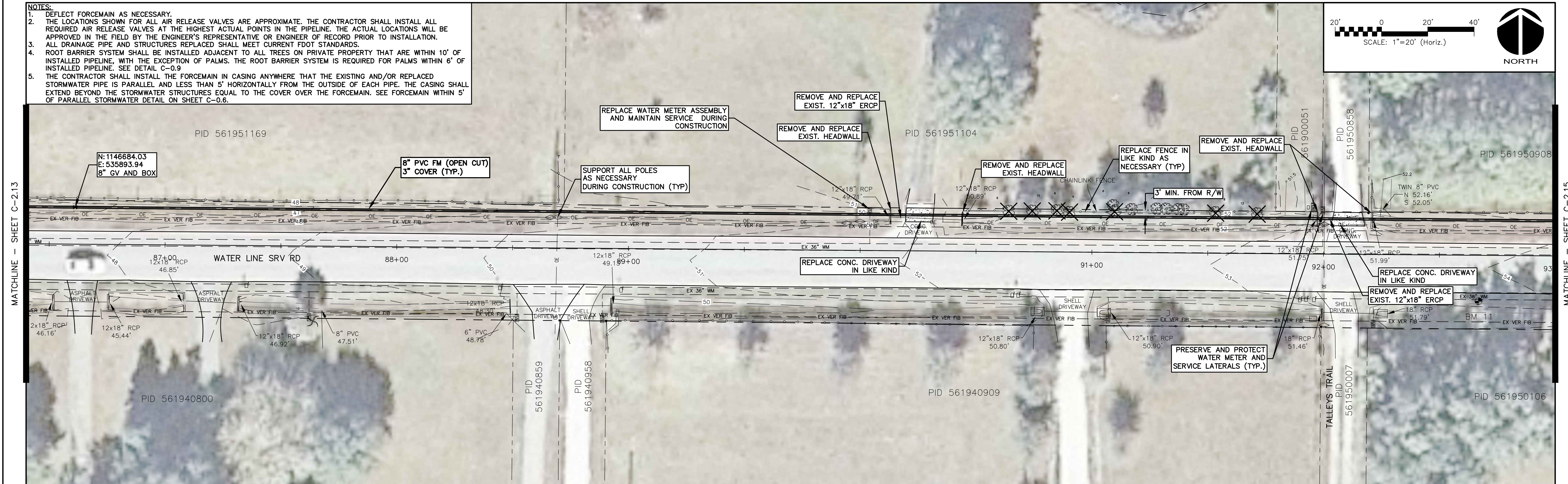
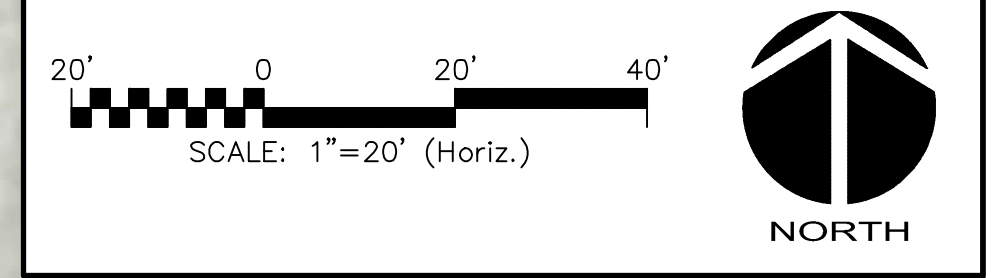
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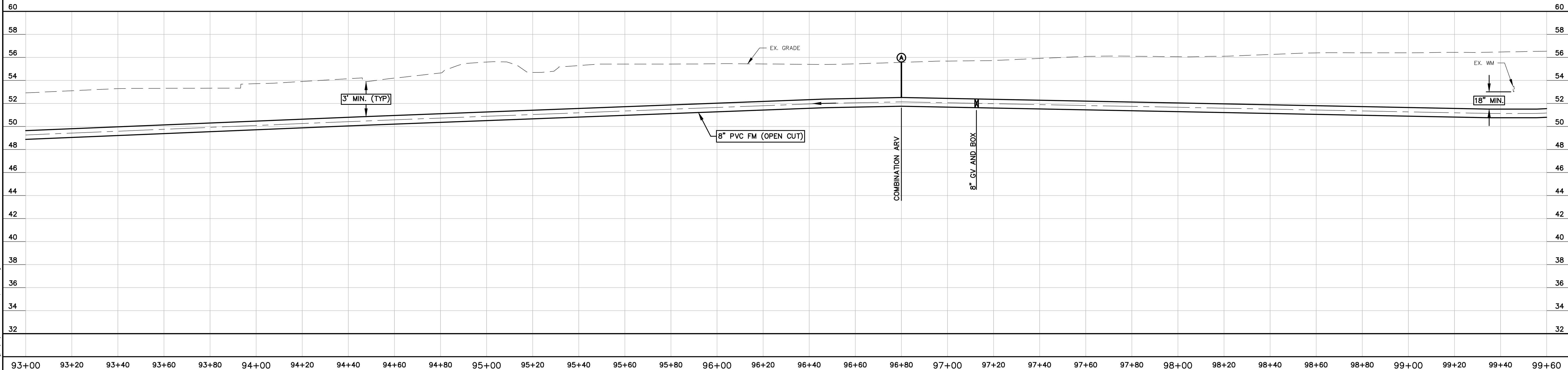
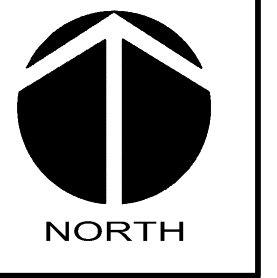
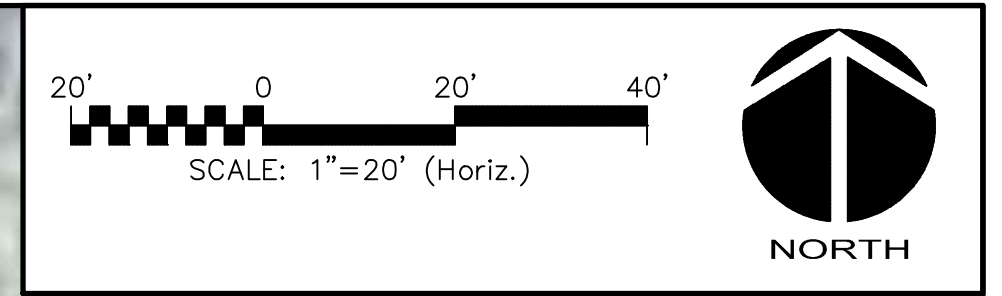
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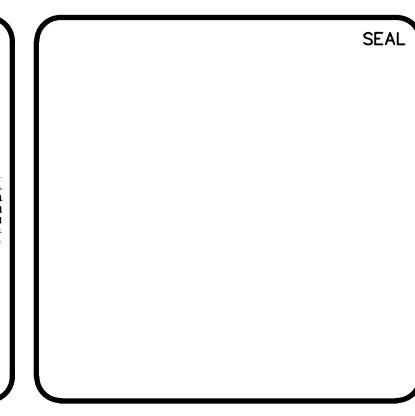
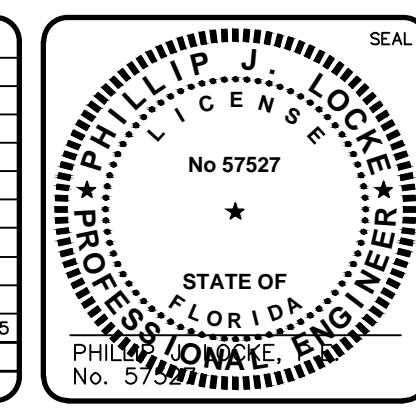
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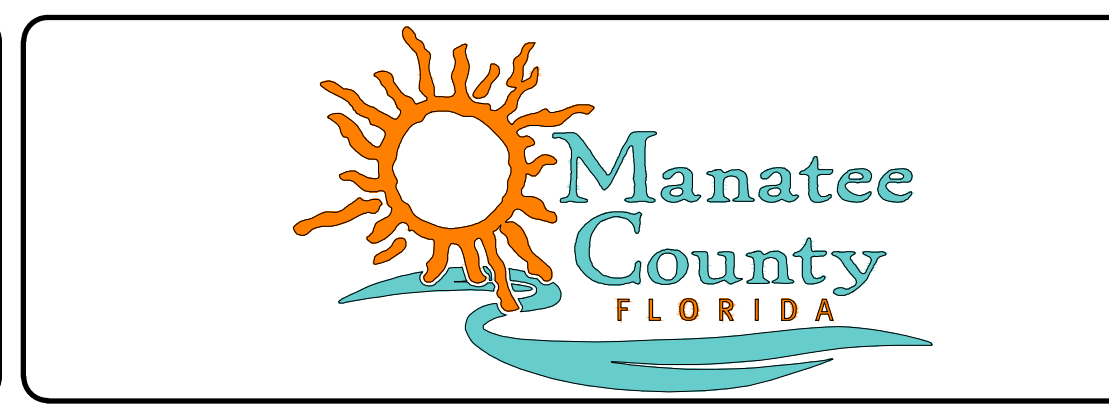
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MCKIM & CREED
 1365 Hamlet Avenue
 Clearwater, Florida 33756
 Phone: (727)442-7196, Fax: (727)461-3827
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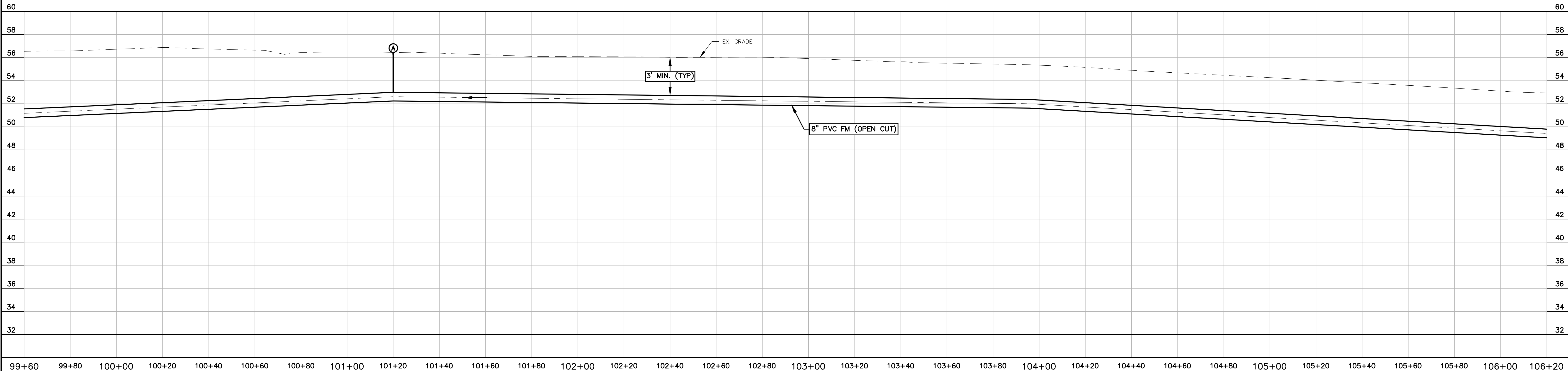
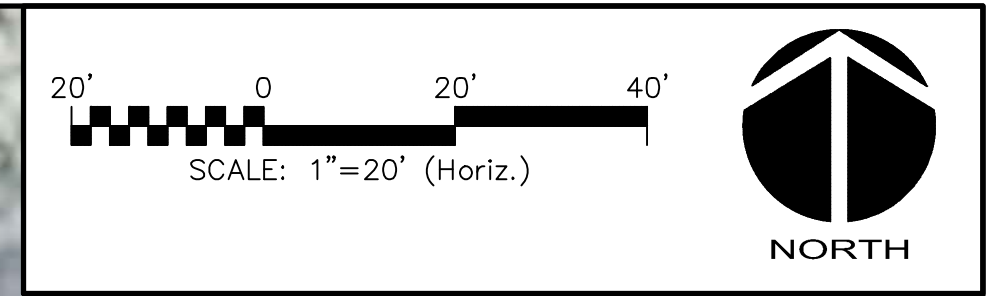
MANATEE COUNTY
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FORCEMAIN PLAN AND PROFILE
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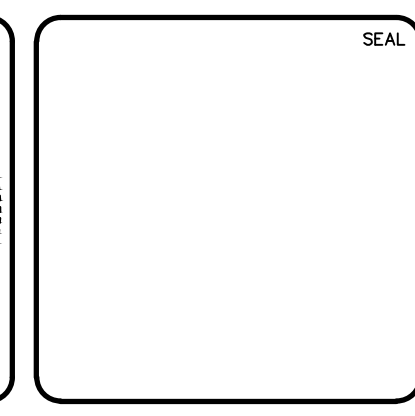
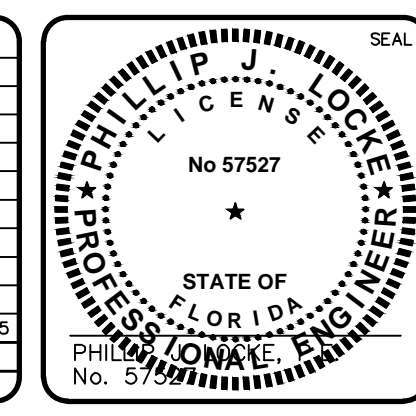
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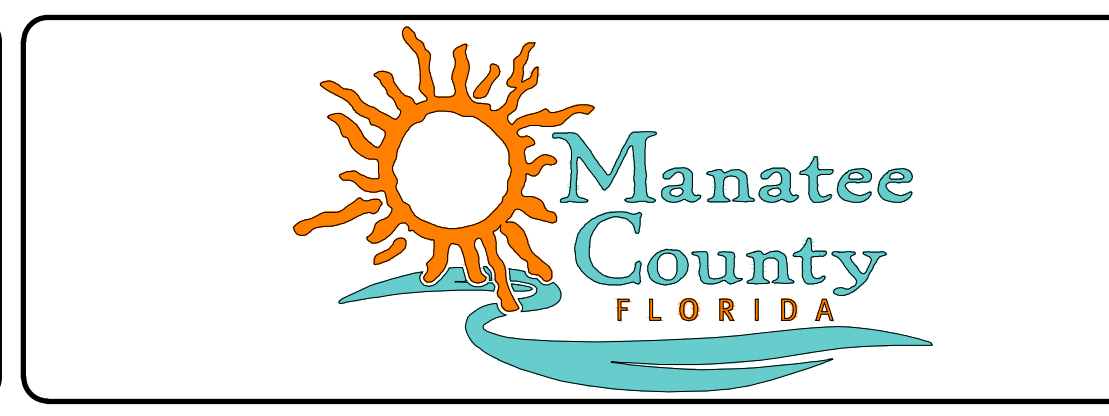
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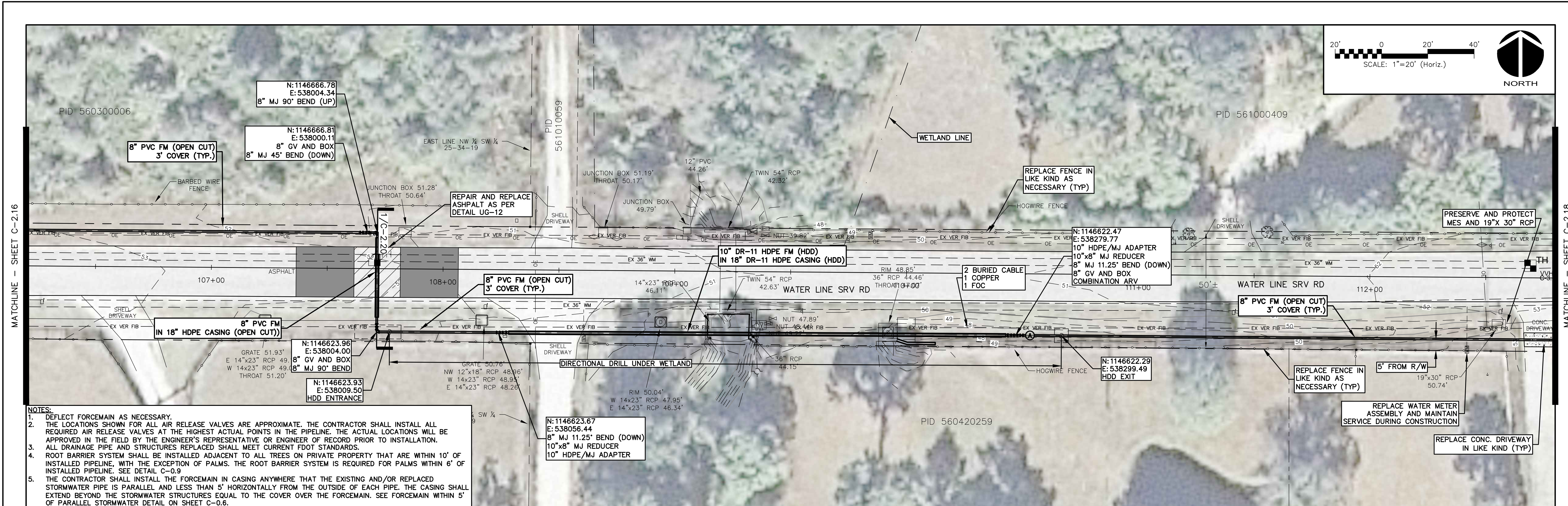
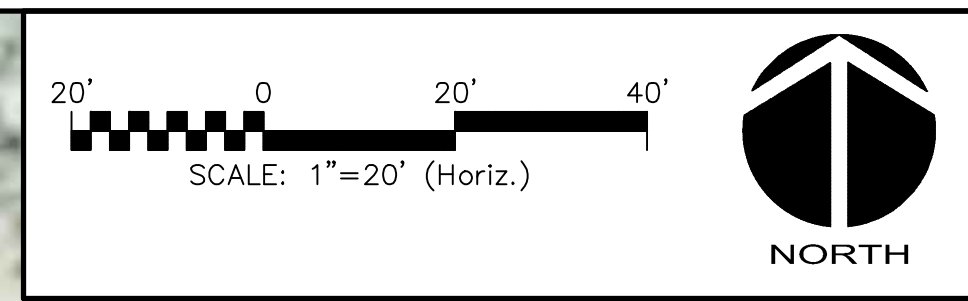


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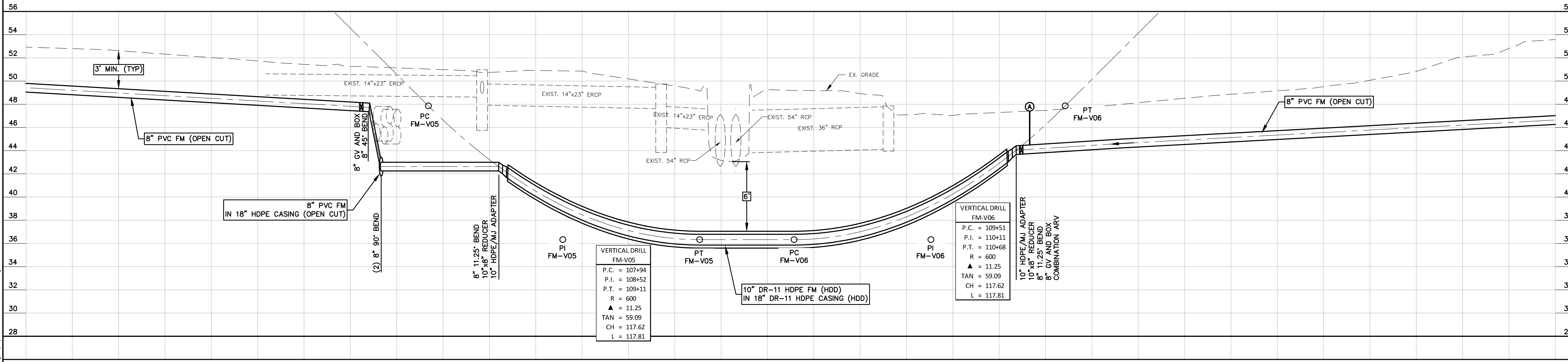
FORCEMAIN PLAN AND PROFILE
 16 OF 19

DATE: OCTOBER 2015	SCALE: 1" = 20'	DRAWING NUMBER C-2.16
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DESIGNED: MN		
CHECKED: JSL		
PROJ. MGR: P.J.		
ISSUE FOR BID		

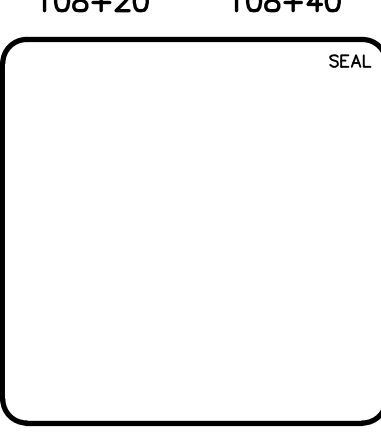
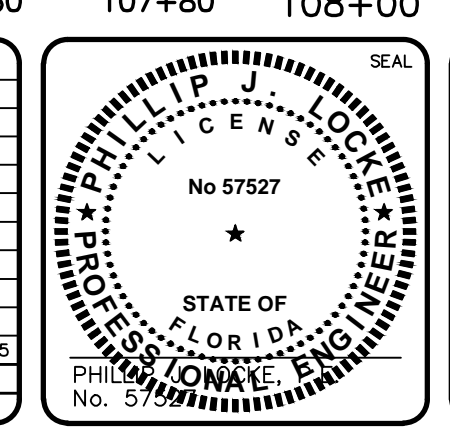
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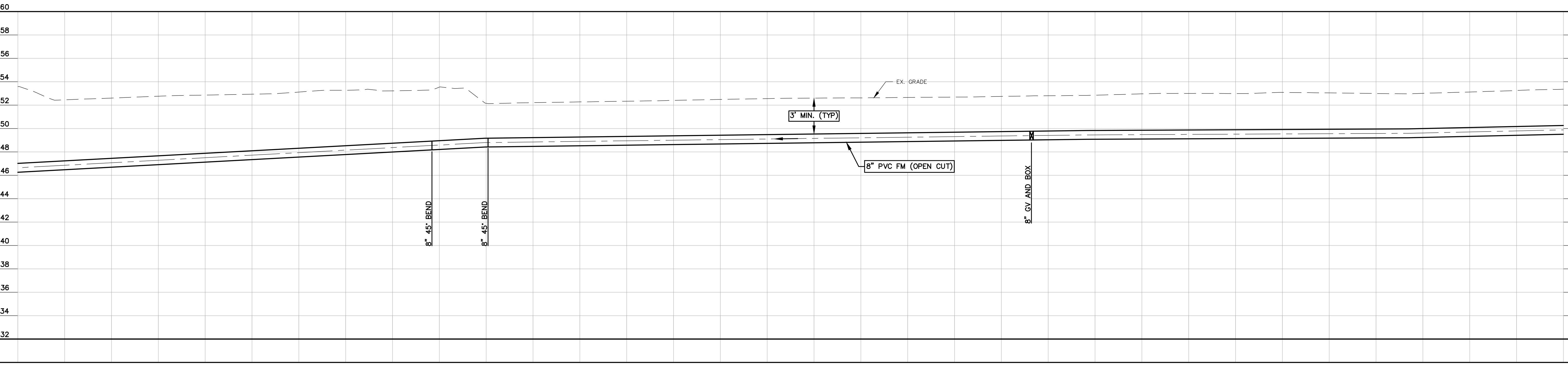
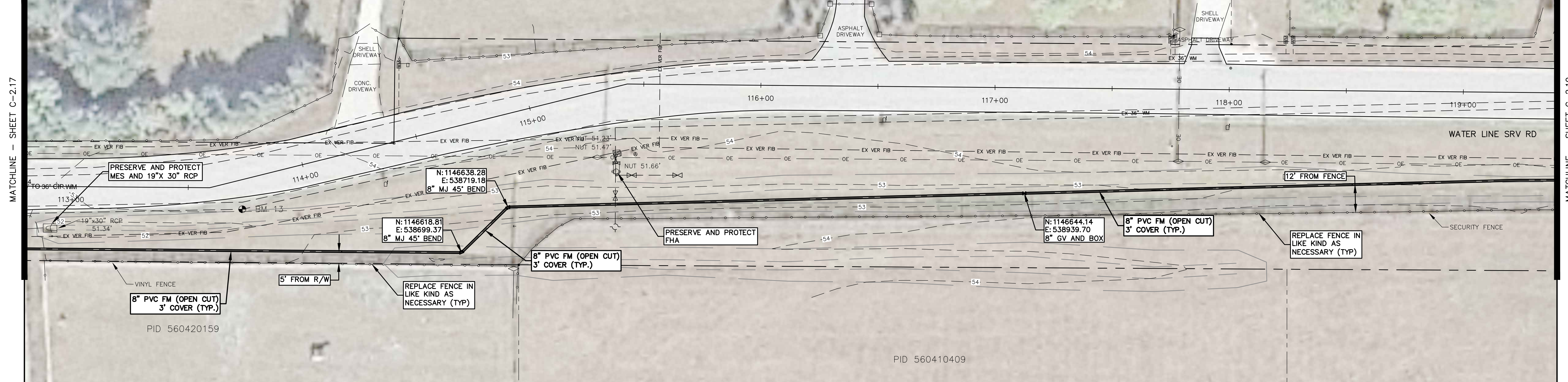
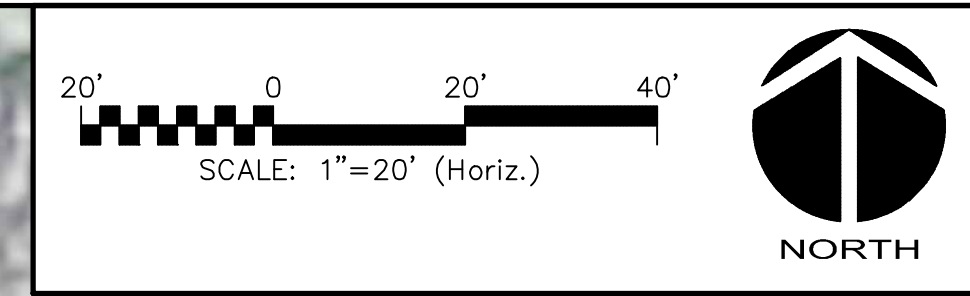


**MANATEE COUNTY
 WTP BIOLOGICAL TREATMENT UNIT**

**FORCEMAIN PLAN AND PROFILE
 17 OF 19**

DATE: OCTOBER 2015	SCALE: 1" = 20'	DRAWING NUMBER: C-2.17
MCE PROJ. # 1024-0167	HORIZONTAL: 1" = 20'	REVISION:
DRAWN: BFN	VERTICAL: 1" = 4'	
DESIGNED: MN		
CHECKED: JSL		
PROJ. MGR. PJD		
STATUS: ISSUE FOR BID		

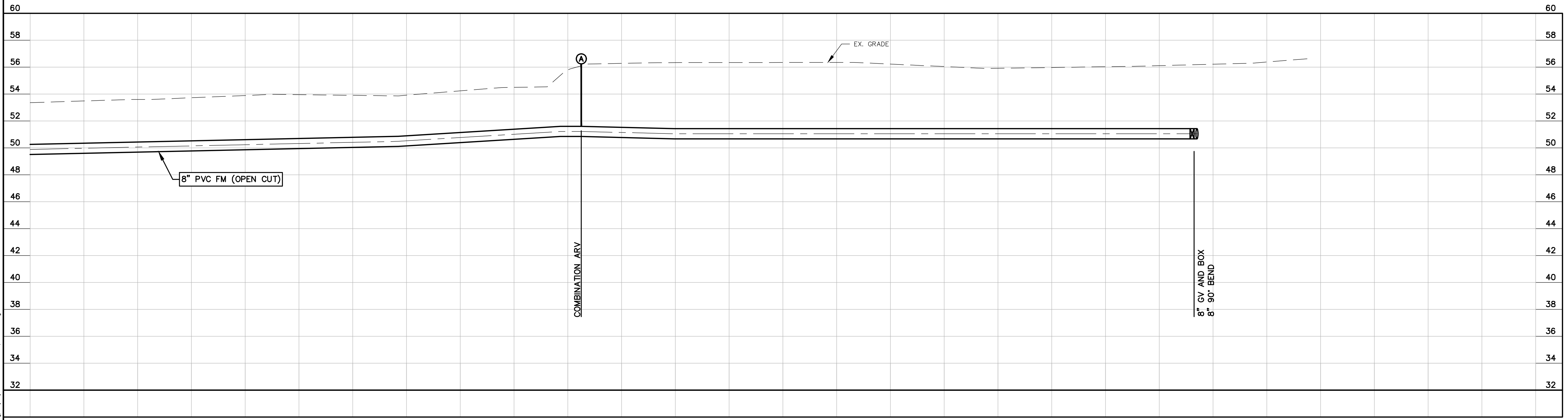
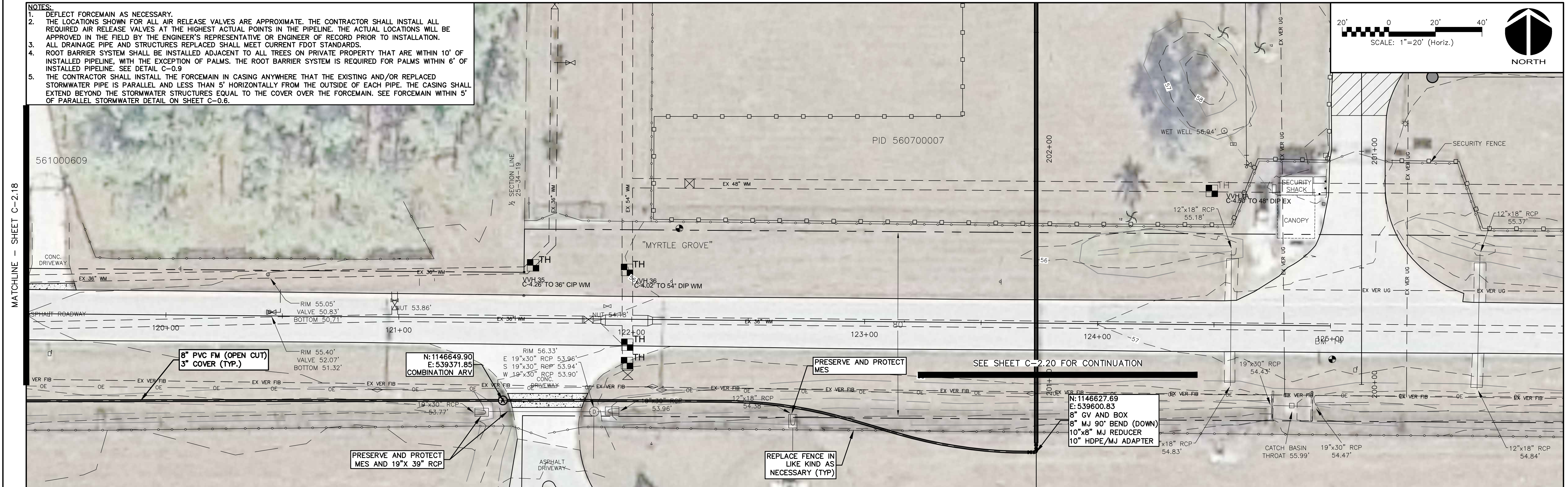
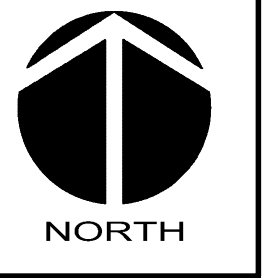
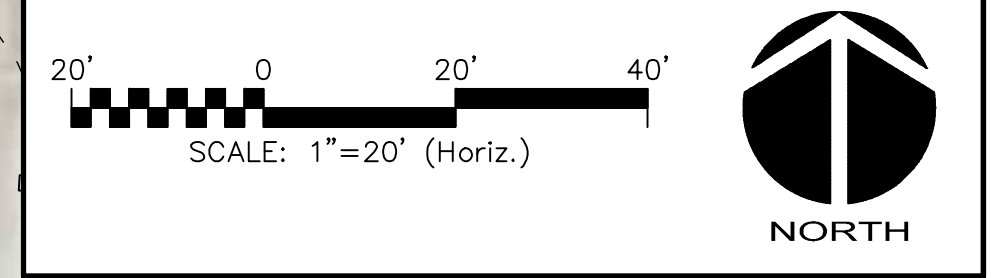
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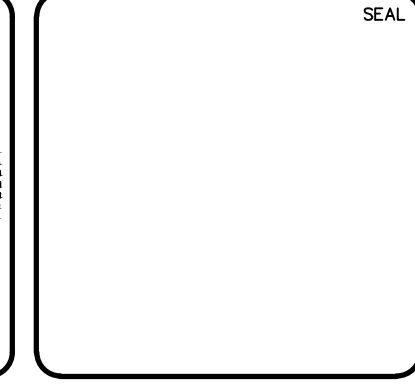
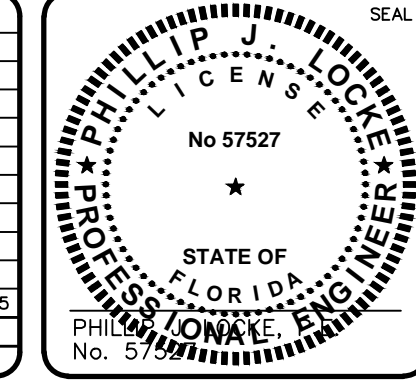
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**FORCEMAIN PLAN AND PROFILE
 19 OF 19**

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